The Journal of Social, Political and Economic Studies

Spring, 1997 Vol. 22, No. 1

The Urgent Requirement for Anti-Ballistic Missile (ABM) Defenses
William T. Lee

Agriculture and Grain Production in North Korea
Sungwoo Kim

The Future of Iran
Gawdat Bahgat

The Economic Miracle in Indochina
John R. Dodsworth

Population Differentials: A View of the 21st Century Through a Coarse Biocultural Filter
Forest Morrison and Wade C. Mackey

Income, Intelligence, Social Class and Fertility
Edward M. Miller

Book Reviews

Council for Social and Economic Studies

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Copyright © 1997 by The Council for Social & Economic Studies

The Journal of Social, Political and Economic Studies is a refereed quarterly journal published by the Council for Social and Economic Studies. All correspondence should be addressed to The General Editor, P.O. Box 34070, N.W. Washington D.C., 20043, U.S.A. [Telephone (202) 371-2700: Fax (202) 371-1523]. Formerly known as *The Journal of Social and Political Affairs*, the subscription rate is $80.00 per annum for libraries and institutions, although scholars and private individuals are entitled to a privileged rate of $37.50 per annum. Reduced three-year subscriptions are available at a cost of $210.00 for libraries and $90.00 for individuals. For mailing addresses outside the USA please add $8.00 per annum. The attention of readers is also drawn to the valuable Monograph Series (ISSN 0895-724X) published in association with the Journal and advertised elsewhere in this issue. Members of the academic community and other qualified individuals are invited to consult the General Editor at the above address concerning articles which they may wish to submit for possible publication. ISSN 0193-5941

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Journal of SOCIAL, POLITICAL AND ECONOMIC STUDIES

Roger Pearson
General Editor
Dwight D. Murphey
Associate Editor

Spring, 1997 Vol. 22 No. 1

CONTENTS

The Urgent Requirement for Anti-Ballistic Missile (ABM) Defenses
By William T. Lee 3

Agricultural Policy and Grain Production in North Korea
By Sungwoo Kim 23

The Future of Iran
By Gawdat Bahgat 39

The Economic Miracle in Indochina
By John R. Dodsworth 71

Population Differentials: A View of the 21st Century Through a Coarse Biocultural Filter
By Forest Morrisett and Wade C. Mackey 83

Income, Intelligence, Social Class and Fertility
By Edward M. Miller 99

Book Reviews 123

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

EDITORIAL BOARD

General Editor

Roger Pearson
Council for Social and Economic Studies
Washington , D.C.

Associate Editor

Dwight Murphey
The Wichita State University

Advisory Committee

James T. Bennett
George Mason University

Stephen R. Bowers
James Madison University

F. McA. Clifford-Vaughan
University of Natal

Sam S. Crutchfield, Jr.
Attorney, Washington, D.C.

Joseph D. Douglass, Jr.
Washington, D.C.

Daniel Ellegiers
University of Brussels

Julien Freund
University of Strasbourg

Robert E. Gilbert
Northeastern University, Boston

Garrett Hardin
University of California, Santa Barbara

George A. Kourvetaris
Northern Illinois University

Edward M. Miller
University of New Orleans

Robert C. Richardson, III
High Fronter, Washington, D.C.

R.J. Rummel
University of Hawaii at Manoa

Alan Ned Sabrosky
Rhodes College, Memphis

Helmut Schelsky
Westfälische University

Joseph Wayne Smith
University of Adelaide

Robert Schuettinger
Yale University

Oleg Zinam
University of Cincinnati

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Urgent Requirement for Anti-Ballistic Missile (ABM) Defenses

William T. Lee[1]
Consultant, Russian Military Affairs and Economics

The author, who was intimately involved in the analysis of U.S. and Soviet Anti-Ballistic Missile programs, surveys recently declassified documents from both U.S. and Russian sources to reveal how the Soviets totally violated the Treaty and how American development of a national ABM defense system was frustrated by the ABM Treaty. Reasons are given why a national ABM system remains an urgent requirement for the U.S.A.

Key Words: ABM Treaty, Anti-Ballistic Missiles, SALT, TABM

This article has been largely developed from my forthcoming book, *The ABM Treaty Charade: A Study in Elite Illusion and Delusion*, to be published by the Council for Social and Economic Studies in April 1997. A summary from an early draft appeared in *Comparative Strategy*, July-September 1996. The study was made possible by the release of a large amount of previously classified information from both Russian and U.S. sources documenting what some had long suspected but could not prove with the evidence available.

The Current ABM Dispute

In 1994 President Clinton proclaimed a national emergency in face of the threat of proliferation of nuclear, biological and chemical weapons, and the means of delivering them. A year later he issued a "Notice of Continuation" of the emergency.[2] Obviously, ballistic missiles are one of the prime means of delivery.

Since the 1994 Congressional election a majority of Congress wants to deploy a national anti-ballistic missile (NABM) defense that

---

[1] Formerly of the CIA and Defense Intelligence Agency, Mr. Lee may be contacted at 715 South Royal Street, Alexander, Virginia 22314 (703) 683-4644

[2] William R. Graham, "The Anti-Ballistic Missile Treaty: The Problem Disguised as the Solution", Testimony Before the U.S. House of Representatives Committee on National Security, 27 September 1996.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

would at least protect the U.S. from nations possessing a small number of ballistic missiles armed with mass destruction weapons. Notwithstanding its "national emergency" declarations, the Clinton administration has frustrated Congressional attempts to mandate NABM on the grounds that it would violate the 1972 ABM Treaty, which is viewed as the "cornerstone" of "arms control" agreements with the former Soviet Union that allegedly are still essential to U.S. security in the new world disorder.

Both the Clinton administration and Congress agree that the U.S. should have "theater" anti-ballistic missile (TABM) defenses to defend U.S. and allied military forces abroad, but they face the thorny problem of defining the difference between NABM and TABM. The ABM Treaty categorically prohibits NABM deployments that can intercept "strategic" missiles, but says nothing about TABM, nor does it define either type of ABM system.

Because requirements for high probability of target kill force TABM designers to overlap NABM technologies – e.g. target and interceptor velocities, sensors and computers – it is very difficult to formulate a workable definition. Furthermore, a TABM having little or no capability to intercept strategic missiles when operating autonomously can be transformed into a NABM system if provided with target tracking and other data from remote "battle management" radars, or optical sensors – surface, air, or space based.

As of this writing the Congress and the Clinton administration remain at loggerheads over NABM. Senator Majority Leader Trent Lott has put NABM on the Senate agenda for this session of Congress (105th, 1997-98). A 1996 national intelligence estimate (NIE) alleged, contrary to previous estimates, that the U.S. simply does not face a ballistic missile threat for a long time to come.

The dispute at the national policy level is compounded by public misunderstanding of other aspects of the problem. First, a large majority of American citizens simply do not believe that despite the trillions of dollars spent on defense in the Cold War the U.S. could do nothing to stop a hostile ballistic missile once it is launched. Most people think that we have ABM defenses.

Second, few Western national security scholastics realize that in 1967 the U.S. was ready to deploy a NABM (NIKE-X) that even Secretary of Defense Robert Strange McNamara admitted was cost-effective against a humongous Soviet threat, and that President

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Lyndon B. Johnson and McNamara sacrificed NIKE-X deployment on the altar of MAD (mutual assured destruction) in order to launch the SALT (strategic arms limitation) process for a net loss in U.S. security.

Third, the best kept secrets of all are that the Soviets began deploying their NABM around 1962, continued deploying and modernizing it under until the Empire collapsed in 1991, and that the U.S. has the evidence. CIA was primarily responsible for this intelligence failure that now extends over three decades. Even Congressional proponents of U.S. NABM still accept the linkage of both NABM and TABM to ABM Treaty compliance, which is absurd because that Treaty never was a valid contract in the first place.

A brief historical review is in order to understand how and why the U.S. got itself into such an absurd situation.

The Road to the Present Impasse

In the late 1950s the former Soviet Union embarked on a two track approach to ABM defenses: complex, fixed site systems solely to defend Moscow; and dual purpose anti-aircraft/missile (SAM/ABM) systems for their NABM. The Soviets put the best they had into their dedicated Moscow ABM defenses, and the best they could afford into their NABM systems.

The mission of the Moscow ABM defenses was to buy enough time for the nomenklatura to get to their shelters to manage a nuclear war. The mission of the dual purpose NABM was to limit damage to critical national political, military, and economic assets in a nuclear exchange.

The original Moscow ABM system consisted of huge phased array battle management radars and the long range Galosh interceptor carrying a multi-megaton warhead.[3] Installation of the Galosh ABM system in the 1960s was hindered by excessive haste and lack of coordination between the responsible organizations. Finally, in 1989 it was replaced by a Soviet copy, with additional computers, of the U.S. NIKE-X system of 1967 vintage.

---

[3] This paper uses standard U.S./NATO designators for Soviet weapon systems and components. In this case, "Galosh" is used as a designator for both the long range ABM interceptor and the first generation ABM system deployed to defend Moscow.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Soviet NABM consisted of the dual purpose SA-5 and SA-10 SAM/ABM systems, the Hen House and LPAR battle management radars to provide essential target tracking data, and a command-control system integrating both NABM and the Moscow ABM defenses.[4] As in the case of air defense, the Soviets considered NABM that was not effective by U.S. standards to be better than none, consistently fielding the best they could.

Failure to understand this basic, and self evident, principle of Soviet behavior was one of the principal sources of erroneous U.S. intelligence assessments of Soviet NABM as being only anti-aircraft systems (SAMs) and ballistic missile attack warning radars. Moreover, the U.S. Central Intelligence Agency (CIA) consistently interpreted the gaps in U.S. technical intelligence collection as proof that the Soviets were not deploying NABM. As contrary evidence accumulated, CIA simply stuck to its dogma.[5]

Like the early Soviet systems, the first U.S. national ABM system, NIKE-ZEUS, was derived from air defense systems widely deployed in the U.S. in the 1950s. While NIKE-ZEUS performed better than expected when tested, it shared the basic deficiencies of its Soviet counterparts: ineffective against MIRVs and a number of countermeasures.

However, the U.S. NIKE-X ABM system designed in 1963-64 was a revolutionary advance combining a powerful, multi-aperture phased array radar (MAR), an IBM 360 type computer, and the high acceleration SPRINT missile for low altitude intercepts. NIKE-X was designed against MIRVs with high performance RVs, while the computer and the high acceleration SPRINT interceptor used atmospheric filtering to counter decoys and other countermeasures. The MAR radar combined battle management, target, and interceptor tracking functions, and was highly resistant to nuclear effects. Almost overnight the U.S. acquired a commanding 20 year lead over the Soviets in ABM technology.

---

[4] LPAR is the acronym for large perimeter acquisition radar. Soviet weapon systems and components are referenced by U.S./NATO designators.

[5] Based on a synthesis of the data (previously classified) from Russian sources and the de-classified U.S. National Intelligence Estimates (NIEs). For detailed source documentation see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C., 1997).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In 1966 U.S. Secretary of Defense McNamara agreed that the NIKE-X system would be cost-effective against a the likely 1990 Soviet threat projected to 1990, but refused to deploy the system to protect U.S. cities on the grounds of "mutual assured destruction" (MAD) theology. According to MAD, any defenses jeopardizing both U.S. and Soviet capabilities to kill 25 to 50 percent of the other's population was "destabilizing" by definition.[6]

The battle over NIKE-X deployment came to a head in a December 1966 showdown between President Lyndon Johnson, McNamara and the Joint Chiefs at LBJ's ranch. McNamara made the standard pitch according to MAD theology: U.S. NABM would be destabilizing; the Soviets would certainly expand their strategic arsenal to restore the *status quo ante* – "assured destruction" of 25 to 50 percent of the U.S. population; neither side would gain anything from such an escalation of the arms race.

The Joint Chiefs' argument followed the lines of the briefing given to McNamara some two months earlier: deployment of NIKE-X would save the lives of tens of millions of U.S. citizens should the Soviets attack our cities; while the results of a nuclear attack could be estimated with some confidence in the absence of defenses, the outcome became highly uncertain were NIKE-X deployed; the Soviet response was by no means foreordained; and the U.S. would gain some strategic advantage however the Politburo responded.[7]

For the moment the Joint Chiefs won the day to deploy U.S. NABM. However, McNamara watered it down to the SENTINEL system he announced in September 1967. That system had been designed to counter the PRC threat to 1985, hence was not effective against a large Soviet MIRVed force. Granted the full NIKE-X system would have been expensive – some $40 billion (ca. 1967 dollars), but that was a fraction of the cost of the Vietnam War. Nevertheless, the money, some 58,000 U.S. killed in action, and generations of national trauma went to Vietnam to support a doomed

---

[6] I was present at the briefing in September or October of 1966 when this occurred – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

[7] Based on memoranda of conversation (memcons) provided by the LBJ Library – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

strategy.

Following the December 1966 shootout at the ranch, Johnson ordered his national security advisor, Walt W. Rostow, to obtain the views of his senior national security and diplomatic advisors – including the CIA – on probable Soviet reactions to U.S. ABM deployment.[8] All respondents agreed that Soviet ABM deployment was limited to Moscow – no NABM in progress. Most agreed with McNamara: the Soviets would react by buying as many missiles as were required to restore their "assured destruction" capabilities. All agreed the time was ripe for negotiations with good prospects of freezing both superpowers' strategic nuclear forces. None perceived that the Soviets had adopted a nuclear war fighting strategy, were deploying the SS-9 and developing the SS-18 and other MIRVed missiles to target U.S. ICBMs, nor that a decade earlier the Politburo had adopted the policy of preferential growth of military expenditures at the expense of consumption to pay for it all.[9]

In January 1967 President Johnson offered SALT to the Politburo because he faced "great pressures" from Congress and public opinion to deploy U.S. ABM defenses, which would lead to more spirals in the arms race, incurring "colossal costs without substantially enhancing the security" of either side.[10] There was no immediate Soviet response.

According to Soviet ambassador Anatoly Dobrynin, McNamara and other senior U.S. officials had been paving the road to negotiate away U.S. NABM since January 1964. In two meetings in 1966-67 McNamara told Dobrynin:

> – many Pentagon "brass hats" were sold on promising U.S. ABM R&D, had recruited allies in Congress and were pressing for deployment;
>
> – both U.S. and Soviet military doctrines were based on "assured destruction" i.e. MAD;

---

[8] During their careers both Ambassadors Foy Kohler and Llewellyn Thompson served as U.S. Ambassadors to the Former Soviet Union.

[9] From memoranda in the Lyndon B. Johnson Library – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

[10] Lyndon Baines Johnson, *The Vantage Point*, (Holt, Rhinehart and Winston, New York, Chicago, San Francisco, 1971), pp. 479-80.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

– the U.S. strategic nuclear arsenal was much larger than "mutual assured destruction....MAD" required, even the much smaller Soviet arsenal was still big enough for MAD;

– ABM defenses were a new element in the equation but could be countered by increasing the offensive arsenal, which was cheaper;

– mutual renunciation of ABMs was the best solution.[11]

No doubt the Politburo and the General Staff were fully informed of these conversations. The initial Soviet reaction evidently was some mixture of suspicion and great skepticism.

According to Dobrynin, these contacts finally resulted in the June 1967 summit between Premier Kosygin and President Johnson at Glassboro, N.J. McNamara attended to brief Kosygin on the need for prompt negotiations on ABM and other "arms control" issues. Dobrynin's memoirs and U.S. memcons from the LBJ Library are remarkably consistent on the discussions at Glassboro; Johnson and McNamara told Kosygin what McNamara previously had communicated to Dobrynin. Johnson wanted to announce that talks "concerning control of the ABM race" would take place, and wanted Kosygin to arrange for talks on this issue between U.S. Ambassador Llewellyn Thompson and Soviet representatives as soon as possible.[12]

Kosygin responded that the development of offensive systems, not ABMs, "were the root and the cause of trouble and tension in the world." According to Dobrynin, at one point Kosygin nearly lost his temper, exclaiming in a loud voice: "Defense is moral, aggression is immoral."[13] He found McNamara's arguments a "commercial" approach to a moral issue. Since the Politburo had not decided how to respond to American entreaties, Kosygin refused to discuss "arms control" issues or to commit the Soviets to talks.

Privately, Kosygin commented on McNamara's briefing by

---

[11] Anatoly Dobrynin, *In Confidence*, (Time Books, Random House, N.Y., 1995), pp. 148, 149-52.

[12] Memcons from the LBJ Library and Dobrynin, p. 165 – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

[13] ibid., pp. 165-6 and memcons from LBJ Library – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"pointing out the Soviet *missile defense systems around Moscow and Tallinn* were designed to save the lives of Soviet citizens", so both sides should agree on limiting offenses first before negotiating defenses away (emphasis added).[14] (At that point, the SA-5 was known as the "Tallinn" system where the first complex was discovered under construction in 1963). As far as can be determined, no Americans were present when Kosygin made this statement confirming the existence of Soviet dual purpose NABM.

Glassboro coincided with the crisis in Soviet ABM programs when they realized their ABM technology was far behind the U.S., decided to develop a copy of the NIKE-X system to defend the apex of the nomenklatura at Moscow, re-oriented other programs, and approved engineering development of their second generation dual purpose NABM systems, the SA-10 and the LPAR battle management radars. (The infamous Krasnoyarsk radar was the sixth in the LPAR series.)

By February 1968, after McNamara told the world for the second time that the SA-5 – per CIA's assessment – really was only an anti-aircraft system (SAM), i.e. not a dual purpose SAM/ABM, the Politburo was convinced that the American goose really was pleading to be plucked. They could continue to deploy their NABM while agreeing not to do so, limit U.S. ABM to insignificant levels, and buy time while trying to regain the technical lead by developing directed energy systems under a national program adopted in 1965. So when SALT negotiations began after a brief mourning period for the demise of Czech "socialism with a human face" under the treads of Soviet tanks, the U.S. was surprised to find that the ABM Treaty was the Politburo's first priority.

Meanwhile in the U.S., widespread unrest over the Vietnam War that McNamara now says he didn't really support all along, combined with the prospect of U.S. national ABM, galvanized MAD and anti-nuclear activists into a campaign that soon killed U.S. ABM entirely while the Soviets cultivated our self deception and tried to catch up and leapfrog us technologically.

By the time the Empire collapsed, Soviet NABM consisted of some 11-12,000 dual purpose SAM/ABM interceptor missiles

---

[14] ibid.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

deployed at SA-5/10 complexes supported by some 18-20 huge battle management radars (Hen House and LPAR). Yet to this day the U.S. officially counts only the 100 interceptors of the "ABM X-3" system at Moscow, which are permitted by the ABM Treaty.

Seldom has a nation acted more like the folklore about the ostrich.

Missile Proliferation in the New World *Dis*order

Basically, the U.S. faces two sources of potential threats from ballistic missiles armed with weapons of mass destruction: nations that already have both the weapons and the delivery systems, and whose **non**-hostility is not assured; and nations currently hostile to greater or lesser degree and which could acquire both a few delivery systems and weapons over the next decade or two.

Russia and the PRC occupy the first category. Russia has an arsenal of some 7,000 nuclear warheads on missiles ready to launch with the capability to destroy all U.S. ICBMs, nuclear storage sites, and fixed command-control facilities, plus U.S. military industries and millions of Americans. As of this writing, Russia probably will not ratify START II to reduce its arsenal to some 3,500 warheads. In either case, Russia has large reserve stocks of missiles and nuclear warheads. The U.S. does not know how either the size or location of such reserve stocks.

The *known* PRC ICBM arsenal presently consists of some 30 ICBM and SLBM launchers, but may become much larger in a few years. When they tried to intimidate the Taiwanese by launching shorter range ballistic missiles into the sea last year, the PRC reminded the U.S. that we value Los Angeles more than Taipei.

The second group of hostile nations with still limited capabilities includes, at a minimum, the five rogues – Iran, Iraq, North Korea, Libya and Syria – most of which are known to have assisted each other in missile and nuclear development, and to have purchased such technology from the PRC, Russia, and elsewhere.

The defense studies center at Britain's Lancaster University reports that a total of 35 non-NATO countries (including the five rogues) have acquired ballistic missiles, and that 18 of these "are

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

capable of installing either nuclear, biological or chemical warheads."[15] As many predicted decades ago, proliferation of ballistic missile and mass destruction warhead technologies already is widespread and inevitably will become more so.

The PRC has been engaged in selling missiles and proliferating nuclear and missile technology for years. The recent military agreement with Russia, the full extent of which almost certainly is not known in Washington, will accelerate sales and technology transfer to greater or less degree. Although No. Korea has less to offer than the PRC, it has been doing its best and may be able to offer missiles with ranges up to 4,000 km. in a few years.

Although not presently hostile, the Russian situation is very unstable. President Yeltsin appears to be a walking corpse at best, the central government in Moscow is almost totally corrupt, and the economy is much more a nomenklatura kleptocracy than a market system. The standard of living of a majority of Russian citizens is much lower than under the Empire. Much, but by no means all, of the Empire's military industrial complex, including missile and nuclear organizations, is in a state of collapse, or worse.

Such conditions are most fertile for transfer of missile and mass destruction weapon technologies in various forms, including trasfer of highly skilled nuclear scientists and engineers to the rogue nations. In addition, the Clinton administration has interpreted the "arms control" agreements it inherited to permit sale of Russian strategic missiles as space boosters. It is not all that difficult to convert anything that can orbit a payload into an ICBM.

While there are no "free lunches" in the advanced weapons business, acquiring and assimilating many of the requisite technologies is by no means as difficult as it once was. As William R. Graham, former Science Advisor to President Reagan, has pointed out:

> In the 1940s, designing and fabricating ballistic missiles was challenging, but with focus, determination, and national-level support it was done very rapidly, even though new types of inertial guidance instruments had to be developed, new rocket engines and

[15] *The Economist*, "Circles of Fear", 4 January 1997, p. 33.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

> missile structures fabricated, and new fuels produced. By contrast, in the 1980s and 90s, the West's schools and universities teach advanced technology to students from all over the world. Missile designs are well understood, missile components are available on the world market, and whole missile systems can be bought and delivered, as in the case of the Soviet SCUDs to China, the North Korean SCUDs to Iraq, Chinese M-11s to Pakistan, Chinese CSS-2s to Saudi Arabia, and so forth. Since most of today's ballistic missiles are mobile, training and launching by customer nation crews can take place in the missile's country of origin, so that the first launch of a missile from a customer country may occur without warning.[16]

As Dr. Graham also noted, it is not difficult to launch ballistic missiles from ships, so intercontinental range is not an absolute requirement for a missile threat to the U.S.

Nevertheless, in 1996 the Clinton administration served up a NIE reversing previous assessments by concluding that the U.S. would not face the threat that led to President Clinton's 1993 national emergency proclamation until after the year 2010, if then. Several members of Congress criticized that NIE as unconvincing and probably politically motivated. An investigation by the General Accounting Office (GAO) produced a highly critical report – CIA had violated a number of its own basic methodological rules in producing the disputed NIE.

The administration then appointed a review panel headed by former Director of Central Intelligence, Robert Gates. That panel's report found even more errors of omission and commission than the GAO reported, that the NIE had been produced in undue haste, and that at least two senior CIA officials had been highly critical of it. Nevertheless, the Gates panel duly concluded that the case for no ballistic missile threat to the U.S. before 2010 was even stronger than the NIE's finding, and branded all suggestions of political influence on the NIE as "irresponsible."[17]

---

[16] 27 September 1996 testimony to the House Committee on National Security, p. 3.

[17] Independent Panel Review of NIE 95-19, "Emerging Missile Threats to North America During the Next 15 Years", report to the U.S. House of Representatives National Security Committee, p. 2.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

While admitting that the NIE was "politically naive", the Gates panel failed to note that it also was very politically correct for the Clinton administration's policies.[18]

Implications of START II and the ABM Treaty[19]

Having ratified the START II Treaty while Mr. Clinton blocks development and deployment of U.S. NABM, the U.S. Senate has made Russia potentially the world's preeminent nuclear superpower with its combination of strategic offensive and aerospace defensive forces. This may appear paradoxical inasmuch as the former Soviet Union did not achieve a comparable strategic advantage throughout the Cold War.

The basic reason for this apparent paradox is that as offensive arsenals are reduced, the strategic advantage accrues to the side with superior air and missile defenses. The U.S. Cold War strategic offensive "Triad" – ICBMs, SLBMs, and bombers – carrying 10,000 (or more) nuclear warheads dominated both Soviet air defenses despite Soviet NABM deployed in violation of the ABM Treaty. But the START II Treaty and the NABM that Russia inherited change the strategic balance fundamentally.

In contrast to U.S. reliance on ballistic missiles and bombers, the Soviet Triad consisted of both offensive and defensive components: strategic missiles; air, missile and space defenses; and massive shelters for the leadership and urban evacuation for the population. Instead of relying primarily on dominant offensive forces, the Soviet Triad was based on the synergistic interaction between offense and defense pursuant to Soviet military doctrine and strategy to fight and "win" a nuclear war. By the same token, the dominant components of Soviet strategic offensive forces were IR/MRBMs and ICBMs designed for disarming counterforce strikes on U.S./NATO nuclear delivery systems and command-control.[20]

A preemptive counterforce strike on strategic warning was the preferred Soviet nuclear option for several reasons: the bitter

---

[18] ibid., p. 3.

[19] Portions of this section appeared in an oped in the *Washington Times*, 30 January 1996, and in my paper in the July-September 1996 issue of *Comparative Strategy*.

[20] See William T. Lee and Richard F. Staar, *Soviet Military Power Since World War II*, (Hoover Institue Press, Stanford University, Stanford, CA, 1986), chapters 3,4, and 8.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

experience of 1941 when the German surprise attack almost won the war; in the Soviet calculus silo based missiles typically were five to ten times more vulnerable to U.S. strikes than in the U.S. calculus, and Soviet SSBNs were very vulnerable to U.S. nuclear attack submarines; a counterforce strike would reduce the size of the U.S. retaliatory strike and, hopefully, spread it out in time and space to increase the effectiveness of air and missile defenses.[21] As the Soviet military understood decades ago, no military force is invulnerable, consequently the bottom line for both ABM and air defenses is damage **limitation, not** damage **denial.**

By 1984 a Soviet preemptive strike could have destroyed 80-90 percent of U.S. ICBMs. However, thanks to the U.S. strategic offensive Triad of ICBM, SLBMs and heavy bombers, some 3,700-4,100 SLBM warheads and 2,000-2800 weapons on U.S. bombers probably would have survived. This severely limited the damage limiting potential of a Soviet preemptive disarming strike, unless it paralyzed U.S. command/control, in which case Soviet NABM and air defenses might have limited damage to some significant degree. But that was a chancy scenario.

Under the START I Treaty limit of 6,000 total warheads, the U.S. Triad consists of some 4,750 ballistic missile warheads, roughly 3,750 of which are SLBMs, and some 1,250 cruise missiles (ALCMs) on bombers, still large enough to make a preemptive strike very risky. However, the START II Treaty limit of some 3,500 strategic warheads is below the safety threshold – 500 warheads on ICBMs, ~1750 on Trident class SLBMs, and ~1250 on some 70 bombers, including only 16-20 stealthy B-2s, carrying long range cruise missiles (ALCMs). The number of U.S. targets for a Russian counterforce strike probably will not exceed 600 aim points. Most importantly, while Russia inherited national missile and air defenses, the U.S. has no missile defenses, and no aircraft units dedicated to continental air defense.

---

[21] For analysis and documentation of preemption as the preferred option, and of the Soviet Navy's strategic defensive mission to protect their SSBNs, see William T. Lee and Richard F. Staar, *Soviet Military Policy Since WW II*, (Hoover Institution Press, Stanford University, Stanford, CA, 1986) pp. 45-47. The unknown story of the vulnerability of Soviet silo based missiles per their nuclear weapon effects models will be treated at length in my forthcoming book "How the Cold War Was Won and Lost".

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Ostensibly, START II ensures the survivability of the U.S. Triad by eliminating MIRVed ICBMs on both sides and several other measures. In fact, the START II Treaty would enhance Russia's counterforce advantage over the U.S. because: they are not required to destroy the warheads from their SS-18 and SS-19 missiles, hence can restore their counter-force MIRV capabilities quickly; the number of U.S. targets is much reduced. As the Russian General Staff told the Duma in 1995: "Russia's counterforce potential...will even grow 20 percent as a result of implementation of START II owing to a marked decrease of the corresponding potential of the United States." Further, dismantled Russian MIRV platforms and warheads are to be stocked, not destroyed, under the Treaty "which gives potential advantages....a quick increase in nuclear potential if the United States pulls out of the treaty."[22]

So much for the myth that Russian missiles no longer are targeted on the U.S., which has been featured in President Clinton's State of the Union addresses, and in his re-election campaign.

In addition, the Russians inherited large stocks of reserve (refire) missiles and warheads. CIA and the Defense Intelligence Agency (DIA) covered up the discrepancies in missile stocks in the Soviet START II declarations, as well as in all types of weapons covered by CFE. Neither agency has yet admitted that it underestimated Soviet nuclear weapon production and storage by 50 to 100 percent, or more, and don't know where the additional warheads are.

Under START I the Russians partially dismantled the warheads from decommissioned missiles, i.e. separated the fuzes and other electronics from the fissionable materials, but have not destroyed any. Despite appropriations of several hundred million dollars under the Nunn-Lugar law, not a single nuclear warhead has been destroyed with these funds.

Even if the operational missiles and warheads were destroyed it would be of little avail because the Russians inherited equal or larger numbers in reserve stocks. The service life of these missiles, which have not been fueled or the guidance systems placed on alert

---

[22] A. Koretskiy, "START II Hearings: Cuts Are In Order Because There Are No Maintenance Funds", FBIS-SOV-95-139, 20 July 1995, p. 4.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

status for long periods, can be extended for many years with minimum maintenance.

Meanwhile Russia retains all the defensive elements of the Triad inherited from the former Soviet Union, particularly NABM which consisted of some 11-12,000 ready SA-5 and SA-10 missiles, plus some significant number with SA-12 units.[23] Under the most favorable assumptions after a Russian preemptive attack, a U.S. retaliatory strike would consist of some 1,300 missile warheads, mostly SLBMs, distributed on targets across the vast expanse of Russia. Such an attack almost would be made to order for Russian NABM, most especially if the U.S. attack were not well coordinated as a result of Russian strikes on command-control facilities.

Moreover, the Moscow region and a large area of Western Russia constitute a special case for ballistic missile defense because this area contains three battle management radars from the original Galosh ABM and the ABM X-3, numerous SA-5/10 complexes, and the integrated command-control posts for all these ABM systems.

Based on existing U.S. intelligence and the ABM Treaty, a U.S. planner would allocate *only* sufficient warheads to penetrate the Moscow defenses permitted by the Treaty, most likely by exhausting 100 ABM X-3 missiles plus sufficient warheads to destroy the targets. Such a U.S. attack would have a very low probability of penetrating 2-3,000 SA-5/10 missiles controlled by the three battle management radars at Moscow.

If U.S. target planners were given realistic data on the ABM defenses of Moscow, hundreds of weapons, possibly 1,000 or more, would be required just to exhaust all the ABM defenses, and to destroy the numerous targets in the area. Subtract that number from the 1,300 (maximum) missile warheads likely to survive a Russian counterforce strike, and the threat to Russian NABM in the rest of the country would be reduced to modest levels indeed. The air defense balance under START II is more or less equally grim.

Granted, a significant portion of Soviet NABM and air defenses are located in the successor states outside the present boundaries of

---

[23] *Soviet Military Power*, 1989, p. 51; Jane's, *Land Based Air Defenses*, 1995-96, p. 261. Granted, a number of the radars and missile units are located on the territory of the successor states to the former Soviet Union, and that the operational status of these units is questionable at this time.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Russia, and readiness no doubt has suffered from the ills besetting the post Soviet military establishments. Nevertheless, these problems could be solved by an effective Russian regime willing to discard the obsolete components, probably well over 50 percent of the aerospace defense assets in Russia and the successor states.

The Present U.S. Predicament

Historical delusions about strategic "arms control" not only continue to prevent the U.S. from deploying NABM to defend U.S. citizens, but also prevent us from fielding the best missile defense our technology can provide for U.S. military forces. Most national security policy decision makers in this administration were nurtured in the mother's milk of delusions that strategic "arms control" has worked. Many did not comprehend what the Cold War was about. Fewer still understand how and why the former Soviet Union lost it. In addition, the American cultural imperative that negotiations must not "fail" is endemic to both liberal and conservative persuasions.

Consequently, to the Clinton administration the ABM Treaty is the "cornerstone" of U.S. security that must be preserved at all costs, a contract with a defunct Empire that we must continue to honor. The U.S. must remain defenseless, except for the threat of retaliation, to any and all who have, or may acquire, a nuclear weapon and a missile or aircraft big enough to deliver it. Evidence that the ABM Treaty never was a valid contract is ignored.

Furthermore, in the name of preserving the ABM Treaty, the administration has negotiated with the Russians to limit U.S. TABM technologies: target and interceptor missile velocities; sensors to track hostile missiles; missile volume for air-based interceptors; and even the geographic areas in which TABMs may be deployed. These limits would prevent the U.S. from fielding the best systems our technology can provide, while also precluding defense of U.S. citizens at home. Furthermore, the administration has agreed to provisions that give Russia the right to veto any U.S. TABM it doesn't like.

The technical dividing line between theatre (TABM) and strategic NABM systems inherently is so ambiguous as to be virtually useless. U.S. attempts to define the difference between NABM and TABM systems have resulted in ludicrous contradictions. By the official U.S. definition of tactical and strategic ABM systems given to the Congress by the Nixon administration in 1972, all of the Soviet

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

systems (SA-5/10, Galosh, X-3) at issue are *strategic* ABMs. By the TABM definition the Clinton administration negotiated with the Russians as a de facto amendment to the ABM Treaty, the same systems are all *theatre* ABMs. In addition, these proposed amendments would prohibit the U.S. from fielding the best TABM systems our technology can provide for the defense of U.S. forces and our Allies.

Despite the Clinton administration's illusions and ineptitude, some traditional supporters of that Treaty and the "arms control" process are beginning to get the message. Stephen S. Rosenfeld of the *Washington Post* recently cited the danger of an accidental launch as a result of Russia's "frightful societal indiscipline." Such "an accidental launch could trigger an over-whelming and unnecessary disaster for both countries." Mr. Rosenfeld recommended further reductions in the arsenals on both sides and changes in command-control to take retaliation off automatic in order to "give policy makers time to make a considered response to nuclear attack." Therefore, the U.S. "needs a missile defense of reasonable effectiveness and cost."[24]

Like the Clinton administration policy makers, Congress, the media and the public, Mr. Rosenfeld does not know the Russians inherited a large NABM in violation of the ABM Treaty with the potential strategic consequences outlined above. And reductions below the START II levels, particularly in SLBMs and bombers that could survive a Russian preemptive strike would only make a bad situation worse.

Congressman Ronald Dellums believes that ABM defenses are not needed because the threat of retaliation by the U.S. arsenal of 7-8000 nuclear warheads constitutes ABM defense – "no rational mind out there would attack the United States with our capacity to respond." Mr. Dellums obviously believes that the former Soviet Union observed the ABM Treaty, so reducing the U.S. arsenal makes no difference.[25]

---

[24] Stephen S. Rosenfeld, "Wake Up – The Nightmare's Not Over", *The Washington Post*, 31 January 1997. Mr. Rosenfeld is the Deputy Editorial Page Editor of the *Post*.

[25] Congressman Ronald Dellums, *Ballistic Missile Defense*, Committee on National Security, House of Representatives, 104th Congress, 2nd Session, 28 February and 14 March 1996, pp. 54-55.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Trouble is, not all minds "out there" are rational, and not all "rational" minds follow exactly the same rules. History provides many examples of both. Admiral Yamamoto, who planned the attack on Pearl Harbor, knew that it was irrational to arouse the U.S. "sleeping giant" unless Japan could win the war in the first 18-24 months. The former Soviet Union bankrupted itself pursuing its nuclear war strategy that was totally irrational by Congressman Dellums's "mutual assured destruction" (MAD) standards.

We can indeed be grateful that our nuclear arsenal deterred World War III, in either the nuclear or conventional modes, during the Cold War. Nevertheless, deterrence nearly failed in the early 1980s when the former Soviet Union was on the brink of launching World War III as the Politburo perceived that the long run trends in the "correlation of forces" – political, economic and military – were running in favor of the "imperialist" rather than the "socialist" camp. The fact that the Soviets had national ABM defenses with some damage limiting capabilities, while the U.S. had no defenses whatsoever once the Soviets launched their missiles, was one of the things that tempted the Politburo in 1981-84 to try to reverse the negative trends by military force.[26]

Congressman Dellums almost certainly does not know about this critical bit of Cold War history, and probably thinks that the former Soviet Union adopted MAD – that "odious" doctrine in their view. Neither Mr. Dellums nor the entire U.S. national policy establishment – administration or the Congress – realizes how much the START II arsenal limit of 3,500 nuclear warheads could weaken our deterrent against Russia.

Some Conclusions[27]

The U.S. achieved none of the objectives it sought through strategic "arms control" agreements. Soviet strategic offensive and defensive forces legitimatized by SALT were precisely those the

---

[26] For a brief discussion of this episode, – see W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997). The nuclear crisis of 1981-84 will be treated at length in my forthcoming book, "How the Cold War Was Lost and Won".

[27] Selected from W. T. Lee, *The ABM Treaty Charade* (Council for Social and Economic Studies, Washington D.C. 1997).

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

process was supposed to prevent. Ironically, the growth in the military burden during the SALT era was one of the root causes of the fall of the Soviet Empire. Had "arms control" constrained the Soviet military burden near the 1968 level as the CIA expected, both the Empire and the Cold War probably would still be with us.

Neither the ABM Treaty nor any other "arms control" agreement did anything to deter the Politburo from approaching the nuclear brink in 1981-84. By ensuring that the U.S. was vulnerable to Soviet counterforce strikes and totally defenseless against ballistic missiles, "arms control" agreements and Treaties actually pushed the hands of the clock closer to midnight in 1981-84. CIA now admits that there was some sort of crisis at the time, but still insists it was not all that serious.

Beyond the approximate number of ready (on launcher) strategic nuclear delivery vehicles, the U.S. was unable to verify most important provisions of SALT agreements and treaties. While the U.S. detected several Soviet ABM Treaty violations, such as extensive testing of the SA-5 in the ABM mode and the Krasnoyarsk radar, protests were lodged only after divisive internal debate. U.S. protests on major issues were ignored until the Empire began to collapse.

Throughout the Cold War the KGB waged a disinformation campaign on "arms control" consisting of: "active measures" supporting and influencing various "peace" and anti-nuclear groups; and feeding our own strategic concepts back in a form that Western academics could not state better. This disinformation campaign was most effective during the SALT era because it was based on the foundation of our own self-deception on every major issue.

In sum, the U.S. must face up to the facts: the ABM Treaty never was a valid contract; the U.S. cannot have the Treaty and either effective TABM or NABM too; the entire strategic "arms control" process has been nothing more than a middle class welfare program in the U.S. Government, Academia, and elsewhere that wasted the money of taxpayers, donors, and subscribers.

Inasmuch as the Soviet Union ceased to exist six years ago, the SALT and ABM Treaties should be declared null and void in accordance with established principles of international law.

The most important national security task facing this country today is to protect both U.S. citizens and our military forces from hostile missiles (and aircraft). In addition to Russia's arsenal of

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

thousands of weapons, China already has a few ICBMs and the capability to deploy many more. The recent arms sales/military technology agreements between the PRC and Russia could open the flood gates of nuclear and missile proliferation, and even revive the most threatening elements of the Soviet military industrial complex. Prospective conditions in Russia add to that danger while also increasing the threat of an accidental or unauthorized launch.

While a majority in the Congress wants to defend the country against ballistic missiles, President Clinton does not because he considers a Treaty that never was a valid contract with a state that no longer exists to be the "cornerstone" of national security policy.

As William R. Graham has put it, the question really is not whether the U.S. deploys NABM, but whether we do so before or after the first nuclear armed missile lands on American territory.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Agricultural Policy and Grain Production in North Korea

Sungwoo Kim
Department of Economics, Northeastern University, Boston

Key Words: North Korea, Agriculture, Grain production, Communism, Juche

From its inception, North Korea assigned the highest priority to agricultural development. Grain is the major dietary staple of Koreans; therefore, an adequate supply of grain was the most effective instrument to satisfy its people, as well as provide tangible evidence for the success of its economic policy. In addition, the agricultural sector became a very important source of earning hard currency in international trade. For these reasons, the country undertook numerous large scale projects in order to increase farm land and its productivity. Some of them were typical socialistic projects, such as agricultural cooperative. Yet, the country introduced several indigenous experiments in agriculture, such as "nature remaking projects" in order to create new farm land.[1]

Analysis of these experiments affords us a rare glimpse into the economic decision making process of North Korea, a process which is hitherto totally hidden from outside observation. Especially relevant is the question as to why the country in recent periods has experienced such dire disaster in grain production and has to appeal for international grain aids even from such technically hostile countries as South Korea and the United States. North Korea's attribution of the disaster to unforeseen natural calamities is partially true – yet is not totally convincing, because South Korea and Japan, due to their geographical proximity to North Korea, also experienced similar calamities yet without serious adverse effects on grain productions.

---

[1] In fact, agriculture was the only sector which afforded indigenous experiments, because heavy and military industries required imported technology. North Korea often imported whole plants from other socialistic countries. See, for example, Valentin Moiseyev, "USSR-North Korea Economic Cooperation," in *The Current Condition and the Prospect of North Korean Economy*, Seoul: Korea Development Institute, 1991, pp.69-93.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This paper attempts to analyze North Korea's agricultural policy, not for the purpose of criticizing its shortcomings, if any, but of finding recommendations to rectify the current defects in order to enhance the general welfare of its people.

The Agricultural Sector in North Korea

North Korea does not publish any reliable data on its economy. At present, the only way to evaluate its domestic economy reasonably accurately is indirectly through an analysis of its foreign trade with the world, the data of which are readily available in great details furnished by trade partners of North Korea. This paper analyzes the period between 1980 and 1994, the latest year for which data was available.[2]

Agriculture has been a very important sector of North Korea's foreign trade. Between 1980 and 1994, total amounts of North Korea's agricultural export and import were $1.6 billion and $1.4 billion, respectively, yielding a $200 million trade surplus in hard currency from agriculture. This is a very salient exception to North Korea's foreign trade which has been marred by chronic debts and inability to obtain new credits.[3]

To analyze the agricultural sector in greater detail, its trade activities are analyzed by two digit commodity classifications. Table 1 and 2 present, respectively, agricultural export and import of North Korea. Important export, accounting for 84% of total export, were fish and vegetables, mainly exported to Asia. On the other hand, most important import, accounting for 65% of total import, was grain and its related products, mainly wheat and corn. Since the main focus of this study is on grain production, we single out foreign trade of grain, i.e., Sector 04, Cereals and Related Products, which are presented in Tables 3 and 4. During our sample period, North Korea's total export and import of grain were $131 million and $901 million, respectively. This means that North Korea has been experiencing a chronic shortage of grain for domestic consumption and had

[2] "World Trade Data Base 1980-1994," International Trade Division, *Statistics Canada*, March 1996.

[3] For detailed analysis of North Korea's foreign trade, see Sungwoo Kim, "North Korea's Foreign Trade with the World between 1980 and 1994," *World Competition*, Vol. 19, No.4, June 1966, pp.69-80.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to import on the average $51 million worth of grain annually, an enormous burden for a hard currency scarce economy.

In order to observe a trend factor, North Korea's annual trade in grain is plotted in Diagram 1. From the diagram, we observe two distinctive pattern; North Korea's grain export, mainly rice, steadily declined over the years and became almost negligible in recent periods, whereas its grain import, mainly wheat and corn, significantly increased since 1984 and peaked in 1993 with an annual import of $125 million. Yet, one year later in 1994, the grain import declined sharply to $38 million. Such a drastic decline might have been possible if North Korea's domestic grain output increased significantly in that year. This possibility appears to be very remote. Grain, especially rice, had been a very important export of North Korea for hard currency. Yet in 1994, total grain export of the country was negligible $.3 million. Then, the only logical explanation for the sharp drop in grain import in 1994 is that due to an enormous amount of unpaid past debts of North Korea, grain exporting countries refused to issue new credits to North Korea, and this forced the country to seek international aid in order to obtain grain.

North Korea's currently chronic shortage of grain, if true, is very surprising, because under the all-encompassing policy of *Juche*, or economic self-sufficiency, grain self-sufficiency was accorded the highest priority with numerous large scale projects, which significantly increased arable land *per se*.[4] For simple statistics, we may compare grain production of North and South Korea. South Korea, with a slightly better environment for agriculture, yet much smaller arable land due to highway construction, than North Korea, has now become

[4] Between 1965 and 1990, arable land increased from about 1.9 million to 2.1 million hectares. Yet, total grain output, which reached 5.1 million tons in mid-1980, steadily declined to 4.8 million tons by 1990, and this could satisfy only about 75% of its basic grain need for 6.4 million tons. (*Vantage Point*, September 1993, P.18.) In addition to importing 1.1 million tons of grain, even from the United States, with precious hard currency, (Murooka Tetsuo, "The Future of North Korea Trade in Agricultural Products," *Vantage Point*, March 1993, P.8.), North Korea resorted to the emergency measure of reducing an already bare subsistence grain ration by 20% and initiated "two meals a day" campaign, ostensibly for health reasons. Yet, the grain shortage was so severe that there were in fact several spontaneous riots, almost unthinkable events in North Korea, despite very grave consequences. See, *A Comparative Study on the National Strength between South and North Korea* (in Korean), Seoul:National Unification Board, 1992, especially, pp.244-251.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

a grain exporting country through better scientific management of its agriculture. On the other hand, North Korea has experienced a decline in grain output despite the increase in farm land.[5] These observations seem to suggest that the main culprit of grain failure in North Korea is the defects in its current agricultural policy. Fortunately, an economic policy is man-made and can be reversed with minimal adverse impacts.

In the rest of this paper, we will attempt to identify the main defects of North Korea's agricultural policy for grain production and suggest recommendations to rectify them.

Three Unique Agriculture Policies in North Korea

It is important to understand North Korea's three unique polices which constitute the foundation for its government and economy, including agricultural sector:

(a) *Juche* policy or Own Master System.[6] Applied to the economy, it mandates an autarky through maximum reliance upon indigenous resources and technologies. Coupled with constant emphasis on speed, this policy encourages an improvisation with crude local technology and materials in lieu of the accepted scientific method – often with serious adverse consequences in later periods.[7]

(b) A pyramid chain of command with all policies and quotas emanating from top to bottom. Successes and failures of policies are all attributed to the top. However, since the Leader can never make a mistake, there is absolutely no system of accountability for policy failures, except for failures of assigned quotas. Worse yet, since flaws

---

[5] *A Comparative Study on the National Strength between South and North Korea* (in Korean), Seoul: National Unification Board, 1992, P.244.

[6] The *Juche* doctrine may in fact have been originated from Kim's desire to maintain neutrality in an acrimonious rivalry between former U.S.S.R. and China. See for example, Vladimir Petrov, "Mao, Stalin, and Kim Il Sung:An Interpretive Essay," *Journal of Northeast Asian Studies*, Vol. 13, No. 2, Summer 1994, pp.3-30.

[7] In fact, Kim Il Sung strongly encouraged these improvisations with a belief that "science and technology are not the monopoly of experts but could be developed through the workers innovation in production." See, Youn-Soo Kim, "The Economy of the KDPR-its Development, Organization and Functioning," in Youn-Soo Kim(ed.) *The Economy of The Korean Democratic People's Republic*, Kiel, Germany: German Korea Studies Group, 1979, P.50. It is true that on the job training does contribute significantly to labor productivity. However, this has a limit. Beyond the limit, science and technology can be advanced only through systematic study, not through personal experience.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in a policy can never be publicly acknowledged and rectified, subsequent policies must envelope the existing flaws, which magnify and multiply over time.

(c) A penchant of the Leader for offering during field trips on-the-spot solutions for any perceived problems. Local administrators try to outdo each other in implementing them regardless of their intrinsic merits, often through mass mobilization of students and soldiers. Yet once the projects are completed, their zeal suddenly evaporates, because there is no possibility for glory as well as promotion in the maintenance of finished projects. The resultant deterioration of the projects eventually causes more harm than before.

Juche and North Korean Agricultural Cooperatives

The basic structures of North Korean agriculture have been already well documented.[8] In this paper, we analyze only those aspects which have direct relevances on its grain production. In 1953, the year when the Korean armistice was signed, North Korea commenced a conversion of independent farms into agricultural cooperatives, and by 1958, the entire farm land was brought under the cooperative management.[9] Individual ownership of land was replaced by collective ownership of the cooperative, and each member's income was determined solely by the amount of labor contributed.

An average cooperative contained about 300 farm households

---

[8] There are several previous studies which analyze North Korean agricultural system in detail. See for example, Chinkook Lee, "An Analysis of North Korea's Economic Development with Special Reference to Agriculture," *Journal of Northeast Asian Studies*, Vol. 9, No. 3, Fall 1990, pp. 23-33, and Mun Woong Lee,"Rural North Korea Under Communism: A Study of Sociocultural Change," Houston: Rice University Monograph in Behavioral Science, 1976.

[9] Unlike the industrial sector which was promptly nationalized, agricultural collectivization was allowed to proceed gradually on the ground that farmers were less ideologically prepared for a socialized economy. However, a serious shortage of farm workers due to war casualty as well as mass fleeing to South Korea during the Korean war forced the acceleration of agricultural collectivization. In fact, North Korea was in such a dire shortage of labor that the country welcomed voluntary repatriation of Korean residents in Japan. Between 1959 and 1970, 88,611 persons repatriated to North Korea. Sung Teh Oak, "Japanese Economic Assistance to North Korea," in *The Current Condition and The Prospect of North Korea's Economy* Seoul: Korea Development Institute, 1991, p.59.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with 1,500 individuals and 500 Jongbo of arable land (about 1,225 acres).[10] Initially, the formation of the cooperatives significantly increased farm output without major new investments. However, farm outputs soon started to decline noticeably, which forced the leadership of North Korea to re-examine its agricultural policy. In 1964, Kim Il Sung in his "Thesis on the Problem of Socialist Agriculture" issued an edict to undertake immediately four technological revolutions in agriculture – namely, irrigation, chemicalization, electrification, and mechanization, in order to increase farm output as well as to reduce physical hardships for farmers.[11] Local party and government functionaries eagerly took up this directive and carried out several giant projects with the maximum demonstration effects by mobilizing students and soldiers. This pattern of undertaking, i.e., the completion of large scale and most visible projects with the maximum speed through mass mobilization of labor, typifies North Korea's investment in agriculture. Such investment may provide temporary blessings as well as long term curses. For example, newly irrigated land on a high hill required a continuous supply of water from below. For this purpose, powerful giant electric water pumps, imported from abroad, were installed in order to reverse the normal flow of water from top to bottom. Initial success of such project was exalted as a triumph of human ingenuity against the natural law. However, once the project was completed, and responsible officials promoted and transferred, incentives for proper maintenance and operation of the machinery quickly subsided, because the maintenance *per se* was not a glamorous or rewarding activity for promotion. Compounded by the lack of repair parts as well as the lowest priority in the supply of electricity to agriculture, imported water pumps soon became inoperative.[12] Not only did the hilly land became useless; it became the source of floods for formerly productive lower land, thus contributing to the reduction in total farm output.

---

[10] Marina E. Turigubenko, "Food Supply and Consumption in North Korea," a paper presented at International Seminar on Agriculture of North Korea organized by Korea Rural Economic Institute, Seoul, 1992, p.1.

[11] *A Comparative Study on the National Strength between South and North Korea* (in Korean), Seoul: National Unification Board, 1992, p. 249.

[12] Turigubenko, *ibid*, p.5.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 1

Major Export of North Korea's Agriculture Between 1980 and 1994

Sectors	*Explanations*	% in terms of Total *Agricultural Export*
03	Fish,Crustaceans,Mollusc	60%
05	Vegetables and Fruits	24%
04	Cereals and Cereal Preparation	8%
08	Feeding Stuff for Animals	4%
	Total	96%

Major Destinations: Asia (95%), South America (2%)

Table 2

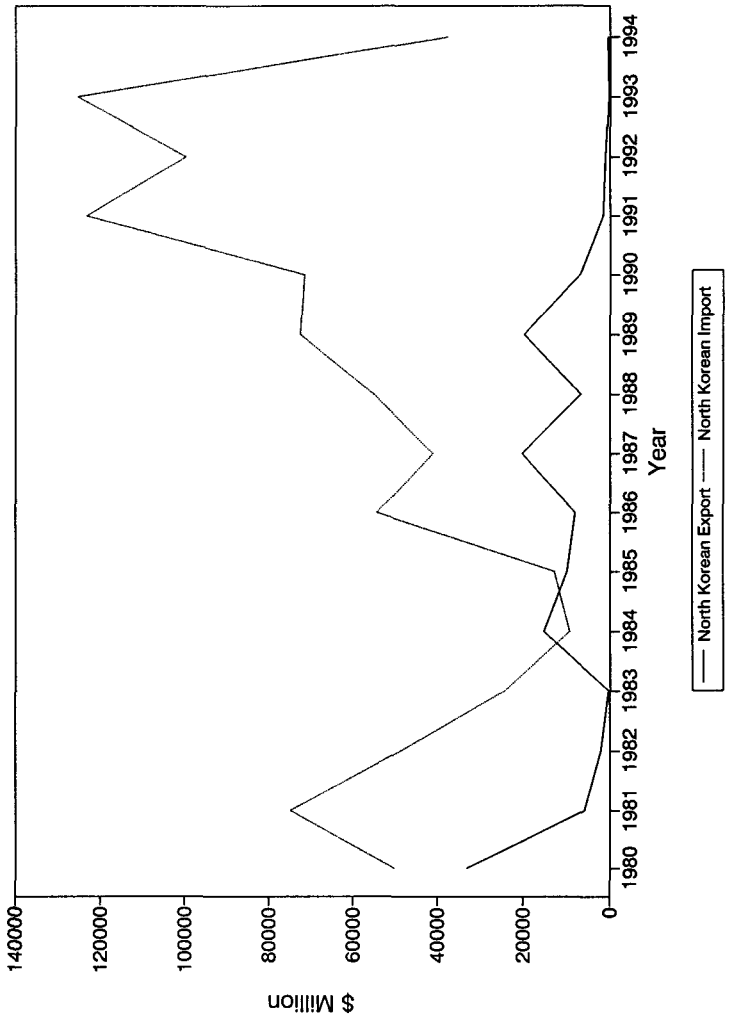
Major Import of North Korea's Agriculture Between 1980 and 1994

Sectors	*Explanations*	% in terms of Total *Agricultural Import*
04	Cereals and Cereal Preparation	65%
07	Coffee, Tea and Spices	9%
06	Sugar and Honey	7%
08	Feeding Stuff for Animals	5%
	Total	86%

Major Sources: Asia (63%), Europe (16%), Australia (11%)
Compiled by the author

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Diagram 1
North Korea's Grain Trade



LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 3

North Korea's Major Export of Sector 4 Between 1980 and 1994

Sector	*Explanation*	*% in terms of Sector 04's Total*	*Major Destinations(%)*
042	Rice	82%	Indonesia (27%), China (19%), Peru (17%), Yugoslavia (9%)
04X	Unidentified Cereal	16%	China (100%)
Total of Sector 04 ($ million)			$131

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 4

North Korea's Major Import of Sector 4
Between 1980 and 1994

Sector	*Explanation*	% in terms of *Sector 04's Total*	*Major Sources(%)*
041	Wheat	50%	Australia (30%), France (30%) Canada (14%), India (9%), Germany (6%), Turkey (4%)
044	Maize(Corn)	36%	China (97%), Thailand (2%)
04X	Unidentified Cereal	5%	China (100%)
042	Rice	4%	Thailand (83%), China (16%)
046	Flour	2%	China (93%)
Total of Sector 04 ($ million)			$901

Compiled by the author

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This predicament could have been avoided if the farmers themselves had any vested interest in the proper maintenance of machinery or in the maximum farm output. The agricultural system of North Korea not only did not provide these incentives but indirectly penalized farmers with such incentives. Each agricultural cooperative was managed by two parallel committees. One was an administrative committee composed of the hamlet's party cadre, and the other was a farm management committee "elected" by farmers. The main criteria for the promotion of a member of the party cadre was an over-fulfillment of the assigned production quota. This tended to emphasize *current* production at the sacrifice of the improvement and maintenance of future production, because once promoted and transferred, the future would become someone else's responsibility. For the farmers, over-fulfillment of the assigned quota had a temporary benefit of a bonus as well as a serious long-term penalty as well. The annual quota was adjusted every year in consideration of the past performance. The over-fulfillment of the current quota simply invited a larger future quota, and failure of the new quota would result in the reduction in the basic income, or a possible punishment. Thus, the farm management committee was content with maintaining a status quo or convincing planners for a lower production quota.

Compounding this difficulty were cumbersome and confusing bureaucratic rules and regulations of the farm management committee itself, which significantly contributed to the resentment and discouragement of individual farmers. Two most important functions of this committee were job assignment and income determination of individual farmers. A farmer was assigned to a specific job in a work team designated for a particular area of a cooperative farm, in consideration of the person's gender, age, level of skill, and location of residence. This assignment was very important because a farmer's income depended upon the specific individual task – as well as an overall performance of the work team – of the farmer.[13] This complicated and cumbersome system practically guaranteed the possibility of mismanagement. First of all, there was no precise scientific formula to determine the level of physical strength and skill

[13] Mun Woong Lee, *ibid*, p. 62.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

of an individual farmer. This was simply a collective judgement by the management committee. Yet with only fifteen to twenty members of this committee managing 300 households and 1500 individuals over 500 acres of land with significantly different fertility and irrigation facilities, the possibility for honest mistakes as well as favoritism and corruption abounded. Understandably, farmers who rightly or wrongly felt unfair treatments lacked incentives for the maximum efforts. Or farmers were tempted to divert their attention and times from their main duty of farming to lobbying, legally or illegally, for better assignments.

To enhance work incentives, the government awarded titles, badges, or flags for outstanding performances. Yet, practically every one eventually received some form of the honorary titles, and they became meaningless. In fact, the government ran out of suitable names for these titles, and had to resort to a sub-division of an existing title, such as People's Hero, class I, II, III.

The lack of incentives of the collective farming eventually generated a widespread apathy among farmers, who now preferred to do the minimum required work on the cooperative farms. Instead, they concentrated their efforts on the government sanctioned private plots, known as "kitchen plots" of 20-30 Phyong (one Phyong equals about 3.3 square meters).[14] Most farmers sold the products from these plots at farmers' markets which were held two to four times a month in large cities. Those with means, mostly government and party functionaries, supplemented their government rations with goods purchased from the private market. Workers and ordinary citizens had to subsist on the insufficient government rations. The food shortage became so acute that in fact there were several riots in front of the government grain warehouses, which forced the leadership to devise the *fundamental* solution to rectify food shortage once and for all.

Convinced that the main cause for the food shortage was insufficient farm land, North Korea undertook, through mass mobilization of students and soldiers, two giant projects known as "Nature Remaking Five Project" in 1976 and "Four Great Nature Remaking"

[14] The 1977 Land Code allowed each farm household a personal plot of 20-30 Phyong. Trigubenko, *op.cit.* p. 2.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

in 1981 with the objectives of reclaiming 300,000 hectares of salt marches on island and coastal lands and creating 200,000 hectares of new lands through extensive terracing of hillsides and mountains.[15] These objectives represented an addition of almost 25% to the existing arable land of 2 millions hectares. Such monumental interferences with nature, without thorough evaluations of their impacts, did have devastating consequences to its agriculture as well as to the economy. The resultant massive deforestation caused a 5% decline in forest land from 9.9 million to 9.4 million hectares between 1970 and 1986. This figure may seem insignificant in terms of the overall forest land. Yet, the deforestation occurred in foothills immediately adjacent to the existing farm lands, and caused serious problems of flood as well as the shortage of timber within accessible distances.[16] In North Korea, rain falls most intensively during the two months of July and August, which coincide with an important season of crop growing. After deforestation of foothills, even a mild rain caused a serious flood which washed down dirts, rocks, sometime boulders, and already planted crops in the foothills, toward farm lands below. This not only destroyed or badly damaged the growing crops on the low land but also deposited those debris to nearby rivers or irrigation dams, causing their bottoms to rise. The shallow rivers and dams caused flood during rainy seasons and drought during dry season.

Compounding these difficulties was an imbalance in the use of fertilizers as a consequence of the *Juche* policy which mandated the maximum use of domestically produced urea and the minimum use of imported phosphate and potash fertilizers. This imbalance caused serious deterioration in the quality of soil and thus in the quality of

---

[15] Woon-Keun Kim, *op.cit.* p. 9.

[16] North Korea's annual need for lumber is 4.5 million cubic meters. After deforestation, the country was able to supply about 3 million cubic meters of lumber and part of the resultant shortage had to be met by imports. Woon-Keun Kim, "North Korean Economic Policy and State of Agrofishery Industry, Part II," *Vantage Point*, January 1993, p. 6. Major objective of the massive deforestation was to eliminate the necessity of grain imports with hard currency. Yet, the net result of deforestation after the immense costs of millions hours of man-power was simply to substitute the type of imports. This type of elementary yet very costly error could have been easily avoided if economic decisions were made by economists rather than politicians.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

farm productivity.[17]

Conclusion and Comment

The root causes of agricultural failure in North Korea can be summarized as follows:

First, the agricultural sector is overseen by two separate committees with often conflicting interests. An administrative committee of party functionaries want to maximize current outputs for the promotion of their careers. For the management committee of farmers, the maximum output carries a potential penalty of higher future production quotas and it therefore prefers to maintain a steady output below the maximum. This conflict severely interferes with an efficient management of agriculture.

Second, collective farming of a cooperative nature does not provide work incentives to individual farmers. A farmer's income is predetermined by a specific task, as well as an overall performance of a work team, to which the farmer is arbitrarily assigned by the management committee. The system encourages mistakes as well as favoritism and corruption, and resentments of some farmers for unfair treatments.

Third, in a strictly pyramid command system, only the leaders at the top formulates major polices. Since the Leader can never make a mistake, defects in the existing policies can not be acknowledged and rectified. Instead, new policies simply envelop old ones to cover the past defects, and flaws magnify or multiply over time.

Fourth, the Leaders's penchant for large scale projects with the maximum speed of completion caused serious structural damage in agricultural areas. Especially, the massive deforestation of the foothills to create new arable lands caused such severe flooding and destruction of crops that total agricultural output actually declined in spite of larger amount of arable land.

Fifth, a strict adherence to the Leader's *Juche* self-sufficiency policy mandated the economy to improvise totally unsound production techniques or input combinations in favor of indigenous

[17] Woon-Keun Kim, "North Korea's Economic Policy, and Current Condition and Prospect of Agrofishery Industry" (in Korean), a paper presented at International Seminar on Agriculture of North Korea organized by Korea Rural Economic Institute, Seoul, 1992, p. 14.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

technology and resources. This caused seriously adverse impacts on its economy in later periods as well as an unnecessary waste of precious hard currencies to finance emergency imports.

In short, North Korea's agriculture is characterized by completely unmotivated farmers and a totally inefficient and inept bureaucratic farm management. Fortunately, most of these flaws are man-made and, if desired, can be rectified within a short period without significant new investments. Collective farming never worked in the former U.S.S.R. or in China, because it required as a prerequisite a transformation of human beings into totally unselfish moral beings, which was neither possible nor desirable. North Korea's collective farming is further encumbered by its unique policy of *Juche* and needs to be replaced by a new system.

The most ideal new system is in fact the old system, that is, a family run farming for profit. Farm land may still be owned by the state but permanently leased to farmers currently tilling the land. The government provides the basic framework within which individual farmers are free to farm to their best advantages. Products from the land, after paying fees for lease to the government, are left to the disposition of farmers. This new system is consistent with North Korea's current "independent accounting system" for small and medium non-farm enterprises, which are allowed, as well as held responsible, to devise their own pricing and marketing strategies in order to generate the maximum profits.[18]

A devil's advocate may voice two caveats. First, whereas products of all non-farm enterprises, even the smallest ones, are destined to the market, a farm family may decide to consume all its net products with nothing or very little left for the market. Second, a farm family is not capable of making sound economic decisions. Both concerns are very condescending to farmers and totally ignore the reality. The first one assumes that farmers are not capable of appreciating the utility of modern consumption. To acquire it, they have to interact with the market economy. For the second concern, success of their counterpart in the South is a sufficient refutation.

Without an immediate and significant injection to boost moral

---

[18] *The Current System and Prospect of Change in North Korea*, (in Korean), Seoul: National Unification Board, 1991, p. 231.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and incentive of farmers, agriculture in North Korea will simply fade away because of lack of vitality, not because of any natural disasters.

I wish to thank my colleagues, Professor John Adams and Dean Anthony Bajdek for many valuable comments, and the Northeast Asia Council of the Association for Asian Studies for partial financial assistance for this research.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Future of Iran

Gawdat Bahgat
Indiana University of Pennsylvania

The economic and political history of Iran since the overthrow of the Pahlavi regime is examined and the future of Iran is discussed with particular reference to economic, religious and international forces.

Key Words; Iran, Gulf States, Oil, Mullahs, Islamic Fundamentalism, Pahlavi regime, Khomeini, Rafsanjani

Iran occupies a central stage in the Persian Gulf. Over the past several decades history, geography, and natural resources have contributed to the rise of Tehran as a prominent regional power.

With a population approaching 70 million people, the Islamic Republic is the most populous country in the Gulf. This has provided the country with a large pool of labor, a sizable middle class, and equally important, a large army. Furthermore, Iran has been blessed with tremendous natural resources. It holds 8.7% of world oil proven reserves and 15% of world natural gas proven reserves.[1] Finally, Tehran is considered an important gate to the energy-rich Central-Asia region. Given all these facts, it can be argued that the stability of Iran is crucial for the security of the vigorous Gulf region and its oil supplies.

However, in the last few decades the Iranian political system has experienced a number of major upheavals. To begin with, four political trends have competed with each other since the end of the Second World War. They are: monarchical, liberal-nationalist, religious, and to a lesser extent, leftist models.[2] It is important to point out that they should not be understood as mutually exclusive categories, rather, the interests of two or more had overlapped

[1] British Petroleum Company, BP Statistical Review of World Energy 1996, London: British Petroleum Company, 1996, pp.4 & 20.

[2] Farhad Kazemi, "Models of Iranian Politics, The Road to the Islamic Revolution, and the Challenge of Civil Society," World Politics, Vol.47, No.4, July 1995, p.557.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

several times, particularly in the late 1970s when most of the political powers were united in their confrontation with the Pahlavi regime. This unity did not last very long. Shortly after the revolution, the mullahs were able to eliminate, politically and physically, the other contenders and to dominate the political scene. Once in power, Ayatollah Khomeini embarked on far-reaching efforts to alter the socio-economic and political dynamics of the Iranian society. The ideals of the revolution represented the core of the Islamic Republic's internal and external policies in most of the 1980s.

Given this drastic change, it is worth noting that the new political elite is not a monolithic one, rather, different factions presented competing visions on how to build a strong Islamic state. Because of his charisma and political shrewdness, Khomeini was able to keep these different groups within the clerical establishment united behind him. The war against Iraq from 1980 to 1988 helped to avoid, or delay, a power struggle within the new regime by focusing the attention on fighting the external enemy. The end of the war in 1988 and the death of Khomeini the following year presented the Islamic regime with a serious challenge. The glue which kept the different contenders together was not there anymore. Many observers thought that the regime would collapse. They were wrong. Instead, a dual leadership comprised of Spiritual Supreme Guide Khamenei and President Rafsanjani emerged. Believing in the main themes of Khomeini's teachings, the new leaders have adopted a more pragmatic and less ideological attitude than their predecessors. Some observers denoted their era (1989-1997) as a "Second Republic"[3] to highlight the continuity and change from the Khomeini's reign or the "First Republic." Thus, some argue, Tehran's foreign and domestic policies are very different from what they were in the first decade of the revolution.[4] Others, like the United States Department of State, believe that the changes are cosmetic and the substances remain the same.

This study seeks to examine the changes introduced and implemented by the Khomenei-Rafsanjani leadership. Three settings

---

[3] Anoushiravan Ehteshami, After Khomeini: The Iranian Second Republic, London: Routledge, 1995, p.xiv.

[4] For example, see Alon Ben-Meir, "The Dual Containment Strategy Is No Longer Viable," Middle East Policy, Vol.4, No.3, March 1996, p.63.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

will be investigated: domestic (economic policy and political institutions), regional (security, borders, and minorities), and international (relations with US, Europe, and Russia). The objective is to highlight the internal and external dynamics which shaped Iranian policy during the second republic and shed light on how they will influence the political course the new government will take and whether it will be a "third republic" or a continuation of the second one.

The Domestic Environment

In addition to its Islamic appeal, the Iranian regime's legitimacy is conditioned by its economic performance. To put it differently, the clerical regime's survival, like any other political regime, depends, to a great extent, on its ability to satisfy the economic needs of the Iranian people. The changes in the economic policies since 1979 should be seen simultaneously as a reflection, a cause, and a consequence of developments in both domestic and foreign policies. These include the economic legacy the mullahs inherited from the Pahlavi regime, the variety of economic models different factions within the Islamic regime tried to implement, the eight-year war against Iraq, the fluctuation in oil prices, and the international isolation.

The Economic Structure:

The Iranian economy under the Shah can be described as state-capitalism. In other words, the government played a significant role in promoting a free market economy. Oil revenues reinforced and consolidated the state's autonomy in the economic system. Because of the Shah's ambition and the rise in oil prices in the mid 1970s, the economy grew at an impressive rate in most of the two decades preceding the revolution. However, this miraculous economic performance came to a halt in the final years of the Pahlavi regime due to political turmoil. Thus, when Khomeini ascended to power the economy was in a state of disarray. Even worse, the clerics had a clearer idea on what they were against than on what they were for. There was no articulated model to replace that of the Shah. The main features of an Islamic economy had been formulated more in theory than in practice. Before having a real opportunity to present and implement an Islamic model of economic development, the Iran-Iraq war broke out. The war dictated the economic priorities for the new

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

revolutionary regime. Thus, in response to the external threat and the internal turmoil Khomeini initiated a wave of nationalization of the main economic sectors particularly large-scale industries, banks, and insurance companies. It is important to re-emphasize that this expanded role of the state in the economic system was not for ideological conviction. The sanctity of private ownership has never been challenged by the Islamic regime. Instead, nationalization was implemented to fill the vacuum created by the departure of many experts in the aftermath of the revolution and to provide the government with resources to finance the war.

As elsewhere in the world, the government proved ill-suited to manage the national economy. This was evident in all sectors particularly in the hydrocarbon one, the main source of public revenues. Oil production fell from 5,242 thousand barrels per day in 1978 to 1,380 thousand b/d in 1981 and remained in this range during most of the decade.[5] Furthermore, the collapse of oil prices in the mid 1980s dealt another heavy blow to the economy. In short, it can be stated that mismanagement, oil policy and prices, domestic political instability, war, and economic sanctions, all combined had had a devastating impact on the Iranian economy during most of the Khomeini's era. The closing years of the 1980s can be seen as a turning point in the regime's economic policies. Three developments contributed to the change in the clerical regime's economic orientation.

First, the end of the war with Iraq in 1988 gave the mullahs an opportunity to focus on economic construction and recovery. It also raised the public expectations of a better life after eight years of sacrificing. The government had no other choice but to try hard to meet these expectations. Second, the gradual collapse of the Soviet Union in the second half of the 1980s discredited the state-led economy model. This made it harder to defend or maintain an increasingly proven-failed economic system. Bluntly, the experience in many countries suggest that economic liberalization is the "right" way to raise the standard of living. Third, the death of Khomeini, in June 1989, ended a decade of accommodating policies by different

[5] Energy Information Administration, International Petroleum Statistics Report, Washington DC: US Government Printing Office, May 1996, p.38.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 3.1
Iran's Oil Production (1978-1996)
(Thousand Barrels per Day)

Year	*Production*	*Year*	*Production*
1978	5,242	1988	2,240
1979	3,168	1989	2,810
1980	1,662	1990	3,088
1981	1,380	1991	3,312
1982	2,214	1992	3,429
1983	2,440	1993	3,650
1984	2,174	1994	3,635
1985	2,250	1995	3,643
1986	2,035	1996	3,712
1987	2,298		

Source: Energy Information Administration, International Petroleum Statistics Report, Washington DC: US Government Printing Office, 1996, p.38.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

factions and keeping a balance between them. The departure of the Islamic Republic's founder prepared the political scene in Tehran to be dominated by one faction. This does not mean the complete absence of intra-clerical political divisions, rather, it suggests that, for a while, the so-called moderates under the leadership of President Rafsanjani had the upper hand in deciding the economic course the country would pursue.

Shortly after he became president in August 1989, Rafsanjani embarked on an ambitious economic program. The main themes of this new economic policy included the privatization of inefficient public enterprises, the elimination or reduction of price control and subsidies, free trade, the termination of the multiple exchange-rate system, and the encouragement of private and foreign investment. It is worth noting that these are identical to the guidelines of the adjustment programs recommended by the World Bank and the International Monetary Fund (IMF) which indicates a significant contrast with the statist economy of the first decade of the revolution, an attempt to reconcile differences with the West, and to get integrated in the international economic system. In order to implement these policies President Rafsanjani had to rely more on technocrats and less on ideologues. Generally speaking, during the second republic religious virtues have occupied second place after the technical skills as a basis for employment and advancement in public offices. These technocrats introduced far-reaching changes particularly in three areas: oil, investment, and foreign borrowing.

Given Iran's huge oil resources and the severe financial crisis, President Rafsanjani invested heavily in raising oil production as Table 3.1 shows.

This increase in oil production combined with a moderate rise in oil prices pushed oil revenues from $9 billion in 1988 to $15 billion in 1994.[6] In similar efforts to liberalize the economy and in a striking deviation from the economic policy of the Khomeini's era, the Rafsanjani administration established a number of free

[6] Central Intelligence Agency, Handbook of International Economic Statistics, Washington DC: US Government Printing Office, 1995, p.94.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

zones in order to attract foreign and private investors.[7] Another important step in the same direction has been in the area of foreign borrowing. In order to assure its independence and to avoid foreign influence, the Islamic regime pursued a strict policy against foreign borrowing. Despite the long eight-year war against Iraq and the low oil prices Tehran owed very little money to foreign countries at the end of the 1980s. In contrast, the Islamic Republic has embarked on an aggressive borrowing policy in its second decade as the table 3.2 indicates.

By the mid 1990s, these new economic policies had yielded mixed results. On one side, during the first decade of the revolution the average annual growth of gross national product (GNP) per capita was -1.4.[8] By contrast, over the five years covered by the First Economic Plan (1989/90 to 1993/94), the real gross national product (GDP) grew by an average annual rate of 7.0 percent.[9] On the other side, the average inflation rate from 1991 to 1995 was 25 percent.[10] Meanwhile, the economy still is dominated by the state, particularly the industrial sector, and vulnerable to external shocks due to a great dependency on oil.

Three reasons had contributed to this modest and limited success of President Rafsanjani's attempt to reform the statist economic system of the Khomeini's era. First, internal power-struggle. The rise of the alliance between Khamenei and Rafsanjani did not last very long. Since the early 1990s, the moderates led by the president had faced serious challenges from other factions within the clerical establishment. A good evidence of this opposition to Rafsanjani's economic policy was in 1993 when the Majlis (the Iranian Parliament) refused to endorse his nomination of Mohsen Nourbakhch as a Minister of Economy and Finance.

---

[7] Vahe Petrossian, "Drawing Foreign Funds to Free Zones," Middle East Economic Digest, Vol.39, No.7, February 17, 1995, p.6.

[8] The World Bank, World Development Report, New York: Oxford University Press, 1994, p.163.

[9] Massoud Karshenas and M. Hashem Pesaran, "Economic Reform and The Reconstruction of The Iranian Economy," Middle East Journal, Vol.49, No.1, Winter 1995, p.90.

[10] International Monetary Fund, World Economic Outlook, Washington DC: International Monetary Fund, May 1996, p.101.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 3.2
Iran's Foreign Debt (1980-1994)

Year a	Total Debt in Millions of $	Total Debt as Percentage of Exports of Goods and Services
1980	04,500	032.0
1987	06,144	049.7
1988	05,831	052.2
1989	06,519	047.0
1990	09,021	044.7
1991	11,330	058.0
1992	16,033	077.4
1993	23,362	121.0
1994	22,712	114.9

Source: The World Bank, World Debt Tables, Washington DC: The World Bank, 1996, p.226.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Second, the lack of tangible progress. As has been suggested above, economic cooperation with Western countries and the international financial institutions represented a significant departure from the policy of the first decade. In return the majority of Iranians were expecting a "warmer" response from the West which did not materialize. Washington has used its economic power and political influence to isolate Tehran. Thus, unlike Egypt and Turkey, for example, which both receive generous aid to alleviate the short-term impact of liberalization, Iran is confronted with trade and financial sanctions. In short, the withholding of Western support to Rafsanjani's economic reform policies has contributed to its weakness. Third, the vulnerability of the traditional constituency of the Islamic regime. The main social force which supported the revolution against the Shah was the urban lower class. As the experience all over the world shows, these people are the first to be hurt by the adjustment programs in the short run because of their dependency on government subsidies, state employment and their vulnerability to a high inflation rate. The Iranian experience with economic reform is similar to that of many other countries. The clerics have shown a great deal of hesitancy to alienate these social forces, their main political constituency. In short, it can be stated that the combined impact of these three reasons resulted in the gradual slow down of the reform efforts in the closing years of the Rafsanjani's presidency.

What is the future of economic liberalization under the newsuccess of President Rafsanjani's attempt to reform the statist economic system of the Khomeini's era. First, internal power-struggle. The rise of the alliance between Khamenei and Rafsanjani did not last very long. Since the early 1990s, the moderates led by the president had faced serious challenges from other factions within the clerical establishment. A good evidence of this opposition to Rafsanjani's economic policy was in 1993 when the Majlis (the Iranian Parliament) refused to endorse his nomination of Mohsen Nourbakhch as a Minister of Economy and Finance. Second, the lack of tangible progress. As has been suggested above, economic cooperation with Western countries and the international financial institutions represented a significant

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

departure from the policy of the first decade. In return the majority of Iranians were expecting a "warmer" response from the West which did not materialize. Washington has used its economic might and political influence to isolate Tehran. Thus, unlike Egypt and Turkey, for example, which both receive generous aid to alleviate the short-term impact of liberalization, Iran is confronted with trade and financial sanctions. In short, the lack of Western support to Rafsanjani's economic reform policies has contributed to its weakness. Third, the vulnerability of the traditional constituency of the Islamic regime. The main social force which supported the revolution against the Shah was the urban lower class. As the experience all over the world shows, these people are the first to be hurt by the adjustment programs in the short run because of their dependency on government subsidies, state employment and their vulnerability to a high inflation rate. The Iranian experience with economic reform is similar to that of many other countries. The clerics have shown a great deal of hesitancy to alienate these social forces, their main political constituency. In short, it can be stated that the combined impact of these three reasons resulted in the gradual slow down of the reform efforts in the closing years of the Rafsanjani's presidency.

What is the future of economic liberalization under the new government? The experience in the last eight years suggests three trends. First, the rise of the technocrats is irreversible. Raising the standard of living, reducing unemployment, curbing the inflation are the core of Iranian policy since the end of the war with Iraq in 1988. The technocrats have proved more successful, or – more accurately – more capable than the mullahs, in managing economic problems. They are likely to maintain the trust of the people and the political elite. Second, the three forces which restrained economic reform under Rafsanjani (internal division, lack of external support, and vulnerability of the political constituency) are still in play. This suggests that for the foreseeable future Tehran is not expected to adopt an aggressive policy of liberalization. A cautious and moderate approach is more likely. Third, the experience of the Islamic regime re-confirms that economic reform is not merely a technical process, but that it is also a political one. Since 1989 economic liberalization and political reform have not

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

gone hand-in-hand. Rather, the former preceded the latter. This suggests that a solid and successful economic liberalization favors, indeed requires, political reform. In other words, a political reform under the new government should consolidate the prospects for economic liberalization.

The Political System:

As has been discussed earlier, the coalition which overthrew the monarchy comprised Islamists, liberal nationalists, and leftists. The early few months of the revolution witnessed the elimination of the secular forces. The religious faction adhering to the teachings of Khomeini signaled its ultimate monopolization of the political system by isolating Mehdi Bazargan, the first prime minister, and Abol-Hassan Bani-Sadr, the first president under the new regime. However, an intra-clerical power struggle has emerged since the early 1980s. Three factions can be identified: the technocrats, the conservatives, and the radicals. They differ on a variety of issues particularly economic orientation and foreign policy.

In order to consolidate his regime and to maintain a balance between these three factions, Khomeini established a political system in which power was diffused between different institutions. These include the Supreme Leader (the spiritual guide of the nation) who is elected for life by the Assembly of Experts that is elected by the people after being approved by the Council of Guardians which is composed of six clerics and six lay jurists. The former are appointed by the Supreme Leader and the latter are elected by the Majlis. Before the parliamentary elections, the candidates must be pre-screened for their religious and revolutionary qualifications by the Council of Guardians.[11] It is worth noting that since the early 1980s the different factions have been represented, more or less, in this sophisticated and complex political system. Furthermore, this formula had proven success to contain any threat, from within or outside the political establish-

[11] Jahangir Amuzegar, "Islamic Fundamentalism in Action: The Case of Iran," Middle East Policy, Vol.4, No.1&2, September 1995, p.26.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment, in the first decade of the revolution. This success can be attributed to the tremendous power put in the hands of the Supreme Leader in his role as a balancer. Given his religious qualifications and political skills, Khomeini successfully performed this role.

In March 1989, Ayatollah Montazeri resigned as a Supreme Leader designate. This step signaled a triumph of the rival camp led by Khamenei and Rafsanjani. Thus, shortly after Khomeini's death in June 1989 the Council of Experts elected Khamenei to succeed Ayatollah Khomeini as a supreme leader and Rafsanjani was elected in July as a president. Moreover, the constitution was amended to give more power to the newly-emerging leadership. This alliance between the two leaders lasted for most of Rafsanjani's first term. It succeeded in reducing the political power of the radical faction led by charismatic figures such as Mohtashemi and Khalkhali. The fourth parliamentary elections in 1992 represented a significant victory for the conservatives and technocrats' alliance against the radicals. The Council of Guardians disqualified about one-third of the registered candidates, most of whom were from the radical camp.[12] The results of these elections gave the technocrats the upper hand in both the executive and legislative branches and provided a momentum to the reform program.

However, the poor economic performance has weakened the appeal of the technocrats. The results of the presidential elections in 1993 in which Rafsanjani won only 63% of the vote compared with nearly 95% in 1989 are seen by many observers as a sign of lack of enthusiasm or declining legitimacy.[13] Meanwhile, the conservatives have since moved closer to the radicals and the growing signs of disagreement between Khamenei and Rafsanjani have become hard to ignore. These intra-clerical divisions were apparent in the fifth parliamentary elections of 1996 in which

---

[12] Farzin Sarabi, "The Post-Khomeini Era in Iran: The Elections of the Fourth Islamic Majlis," The Middle East Journal, Vol.48, No.1, Winter 1994, p.96.

[13] See for example Geoffrey Kemp, Forever Enemies? American Policy and the Islamic Republic of Iran, Washington DC: The Carnegie Endowment for International Peace, 1994, p.30. And Ahmed Hashim, The Crisis of the Iranian State, New York: Oxford University Press, 1995, p.21.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Nateq Nouri, the Parliamentary Speaker who heads the conservatives and is considered a strong critic of Rafsanjani's policy, won the highest number of votes. At the same time, Faiza Rafsanjani, the president's oldest daughter, won the second highest number of votes.[14]

The preceding discussion of the political system in Tehran since the revolution raises questions regarding its shape and role in the closing years of the millennium. In response, four findings should be re-emphasized. First, Iran's body politic has witnessed a strong competition between different factions in the last two decades. This internal division has restrained the political system from taking a bold and aggressive policy in any direction. Instead, a main characteristic of Tehran's policy during most of the 1990s has been lack of coherence and speaking in many contradictory voices. This trend is likely to endure. Second, the existence of competing factions within the political establishment is real but it should not be over-estimated. It is to be remembered that all these political groups adhere to Khomeini's political and religious interpretation of Islam. The great majority of Iranian leaders, inside and outside the government, were Khomeini's students. This suggests that despite the power-struggle, there is a limit to how far the competition can go. All of them have a fundamental interest in maintaining the clerical regime. None of them is likely to pursue any policy which might threaten or undermine the main foundations of the Islamic republic. Third, with all the reservations of freedom in Iran, the mullahs have succeeded in institutionalizing their political system. Most of these institutions were created in the early 1980s, shortly after the revolution. They are still in existence and are still performing their roles. Moreover, the regime has been able to eliminate most of its opponents. It is true that there is a growing popular discontent, but, it is equally true that the mullahs do not face an organized mass-based opposition. This means that the overthrow of the regime by a popular movement, similar to the fate of the Pahlavi regime, is extremely unlikely. A coup d'etat cannot be ruled out but is a remote

[14] The Middle East, "Iran: Will the Mullahs Move on?" No.256, May 1996, p.13.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

probability given the strict control the clerics have on the army. The most conceivable scenario is an evolution, not collapse. This gradual and slow development is already in place inside Iran and in the Gulf region.

The Regional Setting

The main drive of Iran's regional policy during most of the 1980s had been messianic Islam. To put it differently, the "export of the revolution" and its ideals were a major priority in Tehran's relations with its neighbors in most of the Khomeini's era. Realizing the heavy toll of this isolationist policy President Rafsanjani stated that Iran created too many unnecessary enemies. Paradoxically, the second republic policy towards its Gulf and Middle Eastern neighbors demonstrates a striking departure from, and at the same time, a great deal of similarity with, that of the first decade of the revolution. In this regard, the Gulf War should be seen as a turning point providing the Islamic regime with a significant opportunity to resume relations with the surrounding Arab states and to get reintegrated in the regional system.

Even before their creation as nation states the royal families of the Arab Gulf states looked with suspicion to Iran given the demographic and natural resources imbalance between the two sides.[15] Both the Pahlavi Iran and the Gulf monarchies were in the same camp, the Western one, during the Cold War. Still Tehran was perceived as an expansionist power. This perception explains the failure to create a collective security system in spite of the threats from the Baathist Iraq, the Nasserist Egypt and other nationalist and leftist forces. Instead a bilateral cooperation developed to confront specific challenges such as the rebellion in Dhufar-Oman from 1965 to 1975. Khomeini's ascendancy to power worsened this uneasy co-existence even further. The huge gap between the Islamist ideological orientation of the mullahs and the traditional conservatism of the royal families fueled the animosity between the two sides. Not surprisingly, the Gulf states supported

[15] Gawdat Bahgat, "Regional Peace and Stability in the Gulf," Security Dialogue, Vol.26, No.3, Fall 1995, p.322.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Iraq in its war against Iran. The Gulf War changed drastically the dynamics of regional policy. The responsible stand Rafsanjani government took during the crisis improved Iran's image. Thus, shortly after the war the Iranian president visited Saudi Arabia and the diplomatic and commercial relations between Tehran and the other Gulf states were resumed. However, under Rafsanjani leadership the relations can be described as less than friendly. Two important issues have reduced the chances of reconciliation: security and boundaries.

Iran has the largest coastline on the Gulf (2,000 miles). Furthermore, the great majority of the country's trade, particularly oil, is shipped via the Gulf. Naturally, Tehran, before and after the revolution has viewed the security of the waterway as a top national priority. In this regard, the Gulf War was seen in Tehran as a mixed blessing. On one side, it weakened the main regional adversary-Iraq. But on the other side, the war brought an unprecedented and almost unchallenged Western military presence. Being the most populous country in the Gulf, Tehran has preferred the establishment of a regional collective security system excluding outside powers both from other Middle Eastern and Western states. However, for the same reason, the Arab Gulf states perceived the existence of such outsiders as a prerequisite for their protection and survival. The signing of the Damascus Declaration in March 1991 by the six Gulf monarchies, Egypt, and Syria can be seen as an embodiment of this defense strategy. The Declaration has never been carried out because of a strong Iranian opposition as well as domestic reservations within the Gulf states. Still, the royal families have seen the support of the Western powers, particularly the United States, as their best safeguard.

Failing to persuade its Gulf neighbors to reduce their dependency on Western powers, Tehran has pursued its own defense strategy. An examination of the structure of the Iranian armed forces highlights some of the main differences and similarities since the monarchy.

Table 3.3 reveals two important trends in Iran's military buildup. First, the huge rise of defense expenditure in the mid 1970s can be attributed to the Shah's ambition to play the role of regional superpower and in the mid 1980s to the war against Iraq.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The severe decline in this decade reflects the severe shortage of financial resources. Second, Iran's ground forces are among the largest in the region. Its navy suffered heavy losses in the short confrontation with the United States in 1988, but has since been given a strategic priority. The air force reached a peak in the closing years of the Pahlavi regime and by has not resumed that level of effectiveness.

A number of conclusions can be drawn from the preceding analysis. First, in the second half of the 1990s the Islamic regime is militarily weak both in comparison with what it was under the Shah and with those of its big neighbors (Iraq and Saudi Arabia.) Although defeated and weakened by the sanctions, Iraq still has superiority over Iran in all categories of major weapons system.[16] In 1995, according to the International Institute for Strategic Studies, Saudi Arabia spent $13.2 billion on defense, more than five times of what Iran spent.[17] Second, Tehran's attempt to overcome this military disadvantage is not expected to yield fruits in the near future. Iran's defense industries are not competitive with that of the West. Because of the troubled relations with Washington, Tehran cannot obtain badly needed spare parts and was forced to switch to other suppliers, particularly China. It will take some time before a reasonable level of integration of arms from different sources can be achieved. Equally important, the drying financial resources do not leave much to be spent on defense. Third, given this relative decline in its military power, Tehran has few options to pursue its perceived national interests. A large-scale military operation should be seen as a remote probability. More likely a cautious approach utilizing low-intense tactics such as coercion and subversion will be, and indeed have been, adopted.

The border disputes between Iran and its Arab neighbors have been the scene for such limited hostilities. Unlike the Arab Gulf states, the territorial configuration of the Iranian state with well-

[16] Shahram Chubin, Iran's National Security Policy: Intentions, Capabilities, and Impact, Washington DC: The Carnegie Endowment For International Peace, 1994, p.38.

[17] International Institute for Strategic Studies, The Military Balance, New York: Oxford University Press, 1995, p.145.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Table 3.3
Iranian Military Build-Up (1970-1996)

Year	Defense Expend.	Armed Forces	Army	Navy	Air force
70-71	00.779	161	135	09	17
75-76	10.405	250	175	15	60
80-81	04.200	240	150	20	70
85-86	13.877	305	250	20	35
90-91	08.766	504	305	14	35
95-96	02.460	513	345	18	30

*Column 2 is in billion of US dollars.
*Columns 3,4,5, and 6 are in thousand of people.

Source: International Institute of Strategic Studies, The Military Balance, New York: Oxford University Press, several years.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

defined borders and a strong sense of nationalism has taken shape for hundreds of years. Still, the ruling regimes in Tehran, both Pahlavi and Islamic, have made claims and counter-claims over certain islands in the Gulf. Since the early 1990s, a growing attention has been focused on three of them: Abu Musa, the Lesser Tunb, and the Greater Tunb. It is worth noting that as early as 1930s, the founder of the Pahlavi dynasty, Reza Shah, asserted his country's sovereignty over the three islands. These claims were rejected by the British authority which then controlled most of the Gulf.

In late 1970, the Shah renewed Iranian demands and in the following year reached an agreement with Sharjah, one of the seven emirates which together constitute the United Arab Emirates, by which Tehran agreed to give up its claim of sovereignty and to share oil revenues. The internal developments in Iran in the rest of the 1970s and the war against Iraq in the 1980s shifted the attention away from the three islands. However, in 1992 Iran declared full sovereignty over the islands and has since refused any compromise. The United Arab Emirates, with cooperation with other Gulf states, has tried to negotiate a peaceful settlement of the dispute. Given the low significance of the islands and the fact that the clerical regime, under any leadership, cannot afford to look less nationalistic than its predecessor; three conclusions can be drawn. First, the dispute is not expected to evolve into a military confrontation. Second, Iran is not likely to withdraw from the three islands. Third, the issue will continue to spoil Arab-Iranian relations and contribute to the former's suspicion of the latter's intentions. This lack of trust is reinforced by the policies each has adopted towards the sectarian and ethnic minorities in the region.

Iran is a mosaic of ethnic and religious minorities that constitute almost half of its population. These groups are not united in their grievances or aspirations which facilitates the government policy to contain all of them. This public policy of coercive assimilation has been consistent under the Shah, Khomeini, and Rafsanjani. Moreover, there are no expectations of any change in the near future. Three of these groups are considered trans-border minorities: the Shia'as, the Kurds, and the Azeris.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The great majority of the Iranians adhere to the Shia'a sect of Islam. The triumph of the revolution in 1979 sparked off fears in the Gulf states of a similar uprising among their own populations. The Shia'as are the majority in Iraq and Bahrain and a sizable minority in Kuwait and Saudi Arabia. It is noticeable that the revolutionary rhetoric of the early 1980s has been replaced by pragmatic considerations in line with perceived national interests. This trend is likely to continue.

The Kurds represent about 10 percent of Iran's population.[18] Historically, they have been more assertive of their separative aspirations than the other minorities. Shortly after the Second World War a Kurdish state was established, with the support of the Soviet Union, in Mahabad in northern Iran. Following the Soviets' withdrawal from the region, the Shah crashed the short-lived republic and continued his repression of the Kurds. Having united with other opposition groups to overthrow the Pahlavi regime, the Kurds expected an accommodation of their demands by the revolutionary regime. However, their hopes were smashed. Khomeini believed that all Muslims, not just Iranians, should be united under the banner of Islam. Rafsanjani continued the same policy. Furthermore, the new geopolitical developments in the region in the aftermath of the Gulf War have provided Tehran with an opportunity to attack the military bases of the Kurdish Democratic Party of Iran (KDPI) in northern Iraq.

It is worth noting that this opposition to the Kurds is one of the few areas where Tehran and Baghdad are in agreement. Still it is not solid enough to overcome the huge gap of mistrust and animosity between them. Being the two strongest countries in the region, each has aspired to control the Gulf and exclude the other. The revolution in 1979 added an ideological dimension to the already tense competition. Naturally, they clashed with each other in a long war which lasted for eight years. It is noticeable that the cease-fire has never evolved into a peace treaty. During and after the Gulf War, Iran has supported and observed United Nations

[18] Michael Collins Dunn, "The Kurdish Question: Is There An Answer?" Middle East Policy, Vol.4, No.1&2, September 1995, p.74.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

resolutions, but showed sympathy towards the Iraqi people. In most of the 1990s, it can be argued, Tehran's policy has been evolving in response to changes in Baghdad. Meanwhile, it is apparent that a rehabilitated Saddam Hussein or his replacement by a pro-Western regime would not serve Iran's national interests. At the same time, the mullahs seem to understand that the United States and other regional and international powers will not tolerate or allow a pro-Iran regime in Baghdad. Thus, it can be concluded that since the early 1990s, the Islamic regime has been trying to increase its leverage in Iraq with the hope of prolonging the reign of a weakened Saddam regime and maximizing Tehran's role in drawing the future of a political settlement in Baghdad. To put it differently, for the foreseeable future, Iran will keep trying to influence developments in Iraq in its favor. This will depend on internal developments in Baghdad as well as the limits the international community imposes on the Iranian activities. Finally, given the nature of the two political systems in Tehran and Baghdad and the historical animosity between the two states, one can argue that a tactical cooperation in issues such as the Kurds or opposition to the American presence in the region might materialize, but a long-term alliance seems to be very unlikely any time soon.

Another trans-border minority, the largest one, is the Azeris who form about 27 percent of Iran's population.[19] The dissolution of the Soviet Union and the war between the Muslim Azerbaijan and the Christian Armenia over the control of the Nagorno-karabakh region presented a serious dilemma to Iran. A support to Armenia would contradict with its Islamic ideology and a backing of Azerbaijan might stimulate the nationalist drive among the Iranian Azeris. At the end, Tehran chose to mediate between the two sides. This choice reflects the moderation of Iranian policy in Central Asian states which has been adopted since the early 1990s and is likely to continue.

In closing, this discussion of Iran's regional policy shows a

[19] Europa Publications, Europa Yearbook 1995, London: Europa Publication House, 1995, p.1538.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

significant departure from that of the early days of the revolution. Ironically, Tehran's relations with its neighbors in most of the 1990s increasingly resemble those it had under the Shah. Nationalism, as a drive for foreign policy, is taking priority over ideological orientation. Both still exist, but there is a change in order. For the foreseeable future, the Islamic regime is likely to keep pursuing an accommodative, less aggressive, policy towards its neighbors.

The International Scene

One of the most significant changes in Iran's policy after the revolution can be found in the Islamic regime's relations with foreign powers. To put it differently, the mullahs' attitude towards international community contradicts, to a great extent, that of the Pahlavi regime. Furthermore, unlike domestic and regional policies, Tehran's relations with the global powers have witnessed little change since the Khomeni's era. Like many other revolutionary regimes, the clerics showed, in the first few months of the revolution, little respect for the international system and its norms and rules. They perceive the global system as a hostile one given the fact that it is dominated by the United States which the regime in Tehran labeled as the "great satan."

Tehran's relationship with Washington after the revolution is the extreme opposite of what it was under the Shah. In order to protect oil supplies from the Gulf after Britain withdrew early in the 1970s, the United States relied on two poles: Tehran and Riyadh in what is known as "Twin-pillar policy." Given the traditional nature of the Saudi system, Iran was considered the core of this strategy. In conjunction with this policy The United States supplied Iran with $18.86 billion worth of weapons from 1970 to 1978, more than any other country in the world.[20] American support to the Shah was strong and Washington had little, if any, contact with the opposition groups. Given this almost unlimited support and the experience of the nationalist movement

[20] This information was provided to the author by Dr. Peter Jones, Project Leader, Middle East Security and Arms Control Project, Stockholm International Peace Research Institute, Sweden.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

under the leadership of Dr. Mussadeq in the early 1950s, the newly established regime took a very suspicious attitude towards Washington. The Iranian-American relations reached its lowest level when a number of Iranian students, with the endorsement of the government, held 53 American diplomats as hostages for 444 days. Diplomatic relations were severed and have never been resumed. Since then, the two countries have been locked into mutual antagonism. During the Iran-Iraq war, Washington imposed an arms embargo on Tehran in what is known as "Operation Staunch." The Iran-Contra affairs in the mid 1980s worsened relations between the two states even further. In the closing months of the Iran-Iraq war, Washington and Tehran engaged in a number of military confrontations in the Gulf which ended with the downing of an Iranian airplane – accidentally, according to US, and intentionally, according to Iran – and the death of its 290 passengers.

Khomeini's death in 1989 and the positive role Rafsanjani played in releasing American and other Western hostages in Lebanon gave some signs that relations might improve. Moreover, The United States appreciated Iran's stance in the Gulf War and President Bush stated, "good will begets good will." However, this period of reduced tension did not last very long. The two leaders were strongly criticized by their domestic constituencies for proposing a rapprochement policy towards the other. In October 1992, shortly before leaving office, President Bush signed an Iran-Iraq Arms Non-Proliferation Act which expanded the sanctions already imposed against Iraq to include Iran.

President Clinton's administration proved even more confrontational towards Iran than its predecessor. Three important initiatives have shaped American policy in the last four years: the dual-containment policy in 1993, the executive order of May 1995, and the Iran-Libya Act of August 1996. The dual-containment policy was formulated by the, then, National Security Council Martyn Indyk, now US Ambassador to Israel. The policy moves beyond the former policy of balancing Iran and Iraq against each other. Instead, it proposes imposing sanctions against both in order to weaken them politically, economically, and militarily. This purports to facilitate an overthrow of the government in Baghdad

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

and a change of behavior of the regime in Tehran. A fundamental flaw in this strategy is the lack of support from the rest of the international community. A unilateral embargo has no chance of success. In May 1995, President Clinton issued an executive order formally imposing an economic embargo on Iran. This step bans American companies and their foreign subsidiaries from buying Iranian oil even if it is for resale overseas. It also prohibits all trade, trade financing, loans and financial services to Tehran.[21] A year later, President Clinton tightened the economic embargo further by signing the Iran-Libya Act in August 1996. This law requires the President to impose sanctions against any foreign person, company, or subsidy that invests $40 million or more in a year in Iran's or Libya's petroleum or natural gas sectors. The President can choose among six options: a ban on imports into the United States, a ban against federal government purchases, a ban on loans over $10 million a year by any financial institution in the United States, a ban against acting as a primary dealer or as an agent of the federal government, denial of Export-Import Bank assistance, and denial of licenses for exports of controlled technology to companies under sanctions.[22] In addition to imposing economic embargo, the Clinton administration approved spending $18 million on a small-scale covert action program aimed at moderating the policy of the mullahs, including cultivating new opponents to the regime.[23]

It is important to point out that this confrontational attitude adopted by Washington reflects American reservations, indeed opposition, to Iranian policy, specifically in four areas: abusing basic human rights of its citizens, sponsoring terrorism, opposing the Arab-Israeli peace process, and attempting to acquire weapons of mass destruction (WMD).

The United States Department of State's Annual Report on

---

[21] Vahe Petrossian, "Iran: US Issues Executive Order for Qualified Embargo," Middle East Economic Digest, Vol.39, No.20, May 19, 1995, p.12.

[22] Jerry Gray, "Foreigners Investing in Libya or in Iran Face US Sanctions," New York Times, July 24, 1996, p.A12.

[23] Jeffrey Smith and Thomas W. Lippman, "White House Agrees to Bill Authorizing Covert Action in Iran," Washington Post, December 22, 1995, p.A27.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Human Rights states, "The Iranian government reinforces its power by arrests, summary trials, and executions, as well as various other forms of intimidation."[24] Human Rights Watch also criticizes the Iranian practices in its 1996 World Report, "the government closes newspapers, imprisons critics, and forcibly suppresses protests. Religious zealots from competing authorities interfere in people's everyday lives enforcing ever-changing rules of conduct."[25] These statements support US claims of Iranian abuse of human rights. However, the Islamic regime's defenders argue that the Iranian record on human rights should be put into the right context. Bluntly, Iranian practices, as bad as they are, still are better than those of its neighbors Iraq, Kuwait, and Saudi Arabia.

Since 1984, Iran has been on the US Department of State's list of states sponsoring terrorism. In its 1996 report on global terrorism, the Department of State describes Iran as "the premier state sponsor of international terrorism and is deeply involved in the planning and execution of terrorist acts both by its own agents and by surrogate groups."[26] The critics of American foreign policy in the region refute these accusations on two bases. First, that Washington has failed to provide hard evidence to substantiate its claims against Iran. Second, that most of these "terrorist" attacks should be seen as a response to domestic grievances in Israel, Egypt, Saudi Arabia, or wherever they occur, and that they are not orchestrated by the Islamic regime. As an observer of the region's policy put it, "It is a serious distortion of reality to consider Tehran as the central capital of terrorism in the world.[27]"

For many years Israel and Iran, under the Shah, enjoyed warm relations and cooperated with each other and with the

---

[24] United States Department of State, Country Reports on Human Rights Practices for 1995, Washington DC: US Government Printing Office, April 1996, p.1152.

[25] Human Rights Watch, Human Rights Watch World Report 1996, New York: Human Rights Watch, December 1995, p.276.

[26] United States Department of State, Patterns of Global Terrorism, 1995, Washington DC: US Government Printing Office, April 1996, p.24.

[27] James A. Bill, "The United States and Iran: Mutual Mythologies," Middle East Policy, Vol.2, No.3, Spring 1993, p.102.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

United States to contain the threat of Arab nationalism. The Khomeini regime reversed this policy soon after taking over. In February 1979 Iran severed relations with Israel. Since the revolution the Islamic regime has expressed strong opposition to the peace process between Jerusalem and its Arab neighbors. Iran was one of a handful of states which publicly condemned the Madrid Peace Conference in 1991 and the Oslo Agreement in 1993. Given the American commitment to Israel and to the peace process, Washington does not accept Tehran's stance. However, putting the rhetoric aside, it is important to understand how serious Iran is in its opposition to the peace between the Arabs and Israel. First, it is worth remembering that during its war against Iraq the mullahs agreed to cooperate with the Jewish state in order to have access to American arms and spare parts. This episode showed that when national interests contradict with ideological considerations, the Islamic regime chose the former over the latter. Second, Israel does not represent a threat to Iran. The two countries do not share common borders. In April 1996, Jerusalem and Ankara announced a military cooperation agreement according to which the Israeli air force will be in a better position to monitor developments in Iran. Prime Minister Erbakan is not enthusiastic about the implementation of this agreement but cannot cancel it, given the Turkish military support to cooperation with Israel and the United States. It can be argued, the opposition to Israel and the peace process is important to the ideological make-up of the Islamic regime but it is not a national security issue to Iran. Finally, regardless of the strong statements condemning the peace process, Tehran does not appear to have taken any concrete movement to undermine it. As a senior Iranian diplomat stated, "Iran has very clearly said it does not take any practical steps to impede the peace process."[28]

Beyond the questions of Iranian abuse of human rights, support to international terrorism, and opposition to the Arab-Israeli peace process, Tehran's efforts to acquire weapons of mass

[28] John Lancaster, "Iran Denies Involvement in Israel Bomb Attacks," Washington Post, March 8, 1996, p.A26.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

destruction (WMD) as a vital threat. Since the early 1990s the possession of chemical, biological, nuclear weapons and a missile-delivery system has been one of the most disturbing dimensions of the already tense relations between the United States and Iran. The Islamic regime inherited both a well-developed nuclear program and a well-designed nuclear policy from the Pahlavi regime. In 1970, the Shah signed the Nuclear Non-Proliferation Treaty (NPT). Four years later, he took two significant steps. On one side the Shah established the Atomic Energy Organization of Iran and on the other side Iran called for the declaration of the whole Middle East as a nuclear weapons free zone. Furthermore, in line with the twin-pillar policy Iran was receiving cooperation from the United States and other Western powers particularly Germany.

This ambitious nuclear program was neglected in the first half of the 1980s. However, the prolonged war against Iraq renewed interest in developing all kinds of military capabilities, including Weapons of Mass Destruction. Thus, since the mid 1980s the Islamic regime has pursued two policies. First, financial and human resources have been invested to create and develop indigenous WMD. Second, Tehran has sought cooperation with countries with relevant expertise such as China, Russia, North Korea, Brazil, and Argentina. The Iranians believe they have strong incentives to acquire such capabilities. During the war with Iraq Saddam Hussein used chemical weapons against both the Iraqi Kurds and the Iranians. Moreover, many Iranian cities were subject to missile attacks from Baghdad. Neither the United Nations nor any superpower took any measure to protect the Islamic Republic. The mullahs believe history can repeat itself. What the Iraqis have learned cannot be unlearned.[29] The fact that Iraq did not use its chemical weapons against American troops during the Gulf War because of its knowledge that US could have responded in a decisive fashion reinforces the Iranians' belief in the value of such weapons.

---

[29] Ahmed Hashim, The Crisis of the Iranian State, New York: Oxford University Press, 1995, p.63.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Given these incentives to acquire WMD, the Iranians still deny that they have nuclear ambitions. In 1993 Tehran signed the Chemical Weapons Convention which calls for the prohibition of the development, production, stockpiling and use of chemical weapons. Furthermore, representatives of the International Atomic Energy Agency visited Iran and declared that they saw no evidence of a nuclear military program.[30] However, given the failure of the same agency to discover the Iraqi nuclear program in the 1980s, The United States has its suspicions. Preventing Iran from possessing WMD particularly nuclear ones has been a crucial goal for American foreign policy for several years. Washington has used its economic and diplomatic leverage to block any cooperation between Iran and other countries.

At the end of the second term of Rafsanjani's presidency, there is no evidence that Iran has a nuclear device. This should not imply that the Islamic regime has quit trying to acquire such weapons. The Iranian efforts, however, have been impeded by a number of obstacles. These include the lack of both financial resources and well-trained scientists; the lack of unified political will among the clerical establishment to "go nuclear"; and the international embargo imposed on Iran which prevents the country from importing the necessary materials. In sum, it can be argued that the Iranian efforts to have access to WMD are likely to continue. Still for the next several years Iran is not likely to become a nuclear power.

The preceding analysis shows the deep level of animosity between Washington and Tehran since the revolution in 1979. Under the first Clinton administration the relations deteriorated even further. This raises the question of what direction they will take under Clinton's second term and Iran under new leadership. Will the confrontation continue? or are there prospects for rapprochement? It is important to point out that the two countries are too important to each other to remain locked into this prolonged course of mistrust and hostility. Washington cannot

---

[30] Vahe Petrossian, "Watchdog Fails to Find Nuclear Bomb," Middle East Economic Digest, Vol.39, No.11, March 17, 1995, p.7.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

secure peace and stability in the vital Gulf region without Tehran. Geo-policy and history make Iran a prominent power that cannot be excluded. At the same time, it is not exaggeration to state that the mere survival of the Islamic regime depends on its economic performance, how it can meet people's expectations and raise the standard of living. The way to achieve this goal is through more integration in the international economic system which cannot be done without the American consensus. Given this need and interest in reaching a common understanding and starting a dialogue, it is argued that a rapprochement is not likely any time soon. The leaders on the two sides are hostages to hostile domestic public opinion. In both Washington and Tehran the political theaters are not ready for a spirit of compromise and accommodation.

In its relations with a number of authoritarian regimes such as China and Vietnam, Washington has implemented what is known as "economic diplomacy" which means winning over the souls of these regimes through greater access to American capital, trade, and investment.[31] Because Iran lacks any constituency in the political establishment in Washington a different approach has been adopted by the Clinton administration. In his first four years in office, President Clinton offered Iran very few, if any, positive inducements for change – more sticks and few carrots. A fundamental flaw in this approach, as has been suggested above, is the lack of consensus among American allies in Europe.

The relations between Iran and most European countries deteriorated shortly after the revolution. During the war against Iraq, Europe participated in the arms embargo against the Islamic regime. A significant turn to the worse took place in February 1989. The decision to end the war in August 1988 was seen as a triumph to the moderate faction within the clerical leadership. In his efforts to maintain a balance between the different factions, Khomeini gave momentum to the radicals by issuing a religious edict pronouncing a sentence of death on the British author Salman Rushdie on the ground that his novel, The Satanic Verses,

[31] David E. Sanger, "The Iran Exception," New York Times, March 15, 1995, p.C5.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is blasphemous to Islam. In the following few weeks the diplomatic relations between Iran and all the European Community members were suspended. Iranian stance during the Gulf War and its role in releasing Western hostages in Lebanon improved its image and President Rafsanjani had been able to capitalize on that by resuming economic and diplomatic relations. However, the issue of the edict remains to be a source of tension in the Iranian-European relations. In an attempt to present his administration as moderate, Rafsanjani announced that no official state organ would carry out the death sentence against Rushdie. Given the fractionalization of the political system in Tehran, most European countries seem to understand that this is the furthest Rafsanjani can go.

During most of the 1990s, European countries have not been convinced of the validity of the United States' dual-containment policy. In addition to Japan, European countries, particularly Germany, France, Britain, and Italy, are Iran's major trade partners.[32] This reflects Europe's belief in the virtue of a "critical dialogue" with Tehran in contrast to the American policy. A good illustration of the contradiction between these two strategies came in 1995 when the French oil company Total replaced the American one, Conoco, in developing the Iranian offshore oil fields. In short, the Europeans have extensive economic and financial relations with Iran. Sanctions, according to this argument, may result in Tehran defaulting on debt payments. By contrast, economic engagement would lead to moderation. For the foreseeable future, the relations between Europe and Iran are likely to remain on this path of growing economic cooperation with periodic setbacks because of American pressure. This American pressure also has been exerted on Russia to curb its growing cooperation with the Islamic regime.

During most of the Khomeini era, relations between Moscow and Tehran were very cool. The Kremlin leaders feared the spread of Islamic fundamentalism among the Muslim Soviets. Meanwhile, the former Soviet Union was the main source of arms supplies to

---

[32] International Monetary Fund, Direction of Trade Statistics Yearbook, Washington DC: International Monetary Fund, 1995, p.247.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Iraq in its war with Iran. The end of this war as well as the Soviet withdrawal from Afghanistan opened the door for a new stage in the relations between the two countries. Shortly before his death, Khomeini sent a letter to Gorbachev, the only one he wrote to a foreign leader, proposing Islam as the solution to the Soviet problems. Rafsanjani, then the Speaker of the Parliament, visited USSR and laid the foundation for a growing military and economic cooperation between the two sides. Under President Rafsanjani's two terms and probably for the next several years these warm relations between Moscow and Tehran are based on mutual national interests particularly in three areas: arms sales, opposition to American presence in the Gulf, and promotion of stability in Central Asia.

Since the early 1990s the Russian economy has experienced a transformation from state-led to market economy. One impact of this process has been a severe shortage of hard currency. At the same time, confronting international isolation, the Islamic regime in Tehran has been in need of non-Western source of armaments. Thus, in the first half of the 1990s, Russia became Iran's main arms supplier selling $1,844 millions worth of weapons.[33] In addition to this arms for cash deal, both Russia and Iran share strategic interest. The two countries oppose the large American presence in the Gulf region. Ideology was just one dimension in the global competition between the United States and the former Soviet Union during the Cold War. At present, some members in the political establishment in Moscow still think of their country as a superpower. According to this argument, the competition with US has become less ideological and more on economic and strategic interests. In short, Russia, red or not, would prefer to see the United States out of the Gulf region. Iran, as a regional power, shares the same goal. Finally, instability in Central Asian states can disturb the domestic political balance in both Moscow and Tehran. Put differently, it is in the best interests of the two

[33] This information was provided to the author by Dr. Peter Jones, Project Leader, Middle East Security and Arms Control Project, Stockholm International Peace Research Institute, Sweden.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

countries to promote peace and stability in the Central Asian states. In the foreseeable future, these three issues; arms sales, opposition to American presence, and stability in Central Asia; are likely to endure and consequently the Russian-Iranian cooperation is expected to grow even further.

Conclusion

This study seeks to shed light on the most likely course the government in Tehran will take in the closing years of the millennium. To make any prediction, there is no escape from history. History will not repeat itself, but it provides guidelines for possible directions. Examining Iranian policies (domestic, regional, and international) over the last few decades shows dramatic differences between the Pahlavi regime and the Khomeini's reign. Paradoxically, it also demonstrates some similarities between certain policies of Rafsanjani and those of the Shah. In short, it is the contention of this study that beginning with Rafsanjani's presidency in 1989 the Islamic regime has adopted a pragmatic attitude in both domestic and foreign polices. The analysis demonstrates that Iran in 1997 is different in many ways from what it was in 1979. It acts more like a state and less like a revolution. The main reason for this change is the deterioration in the standard of living for the average Iranian citizen. Since the end of the war with Iraq in 1988, the revolutionary enthusiasm has been evaporating and the poor economic performance has occupied the heart of Iranian policy. The mullahs seem to understand that the survival of the regime is at stake. In order to preserve the clerical regime the economic conditions should improve. This cannot be done without institutional reform, peaceful co-existence with neighboring countries, and more integration in the global system. These principles have guided the Islamic regime under President Rafsanjani. They are likely to endure in the near future. However, Iran is not expected to become a pro-Western state or to abandon its Islamic doctrine, even though in the next several years the different factions within the mullah establishment will keep competing with each other with the pragmatic trend prevailing over all the others.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

How Good is Your Country?
What You Should Know

Raymond B. Cattell, Ph.D., D.Sc.

CONTENTS

The Aims and Methods of Our Enquiry
A Scientific Basis for Comparing Countries
Reflections on What Syntality One Would Desire
Locating Family Types among Nations
Developmental Change
Some Change Factors Mapped in America, Australia and Britain
Desirability of Various Racio-Cultural Experiments
Comparison of Developmental Trends
Interpreting Family Values
The Mystery of Cultural Pressure
A Plan for Proceeding

A unique experiment in determining the relative cultural and biological competence of nations developed by one of the world's leading psychologists.

ISBN 0-941694-44-5 • Price: $25.00 (Post $2.50)
VISA AND MASTERCARD ACCEPTED

The Mankind Quarterly
P.O. Box 34070, N.W. Washington D.C., 20043
Tel: (202) 371-2700 • Fax: (202) 371-1523

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The Economic Miracle in Indochina

John R. Dodsworth
International Monetary Fund, Washington D.C.

The highly successful, but not yet fully completed, transition to a market-oriented system in various Indochinese countries is examined and the role of comprehensive exchange rate, fiscal, and monetary policies is identified. Some further developmental problems and a danger of overheating due to recent strong growth are noted.

Key Words: Indochina, inflation, banking systems, fiscal policies, de-dollarization, economic globalization

Few economies in transition to market-oriented systems have achieved relative macroeconomic stability more quickly than those in Indochina or have matched the strong growth rates these countries recorded during stabilization. In the late 1980s and early 1990s, Vietnam, the Lao People's Democratic Republic (Lao PDR), and Cambodia embarked on rapid disinflation that took them from the edge of hyperinflation to single digit inflation rates in 1996. Virtually in step with this disinflation, these countries averaged annual GDP growth rates of 6 to 8 percent and strengthened their external positions.

What policies and conditions shaped this remarkable performance, and why has Indochina's path to stabilization differed so markedly from that of other transition economies?

The good stabilization results obtained in the Indochinese countries, as compared with those in other transition economies, reflect, in part, structural factors that allowed Indochina's economies to respond quickly to new policies. The most important of these factors were:

- Differences in economic structure. Unlike the European transition economies, the three economies of Indochina were dominated by private, family-based agriculture, and the state-owned industrial sector was relatively small.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

· Although the "shock" of the 1991 disruption in aid from and trade with the Soviet bloc was quite significant for Vietnam and Cambodia, its impact was mitigated, particularly in Vietnam, by the earlier introduction of important economic reforms.

·Geographical location may also have been important. The Indochinese countries benefited from being close to rapidly expanding Asian economies that were eager to invest in neighboring low-wage economies.

· In contrast to many transition countries in Eastern Europe, the Baltics, and the other countries of the FSU, the private sector continued to play a role in Indochina even prior to the reforms, and central planning was, in practice, not fully entrenched.

· Finally, for Vietnam, the coming on stream of domestic oil production and large inflows of foreign direct investment also facilitated a relatively smooth transition.

This is not to argue that all of the initial conditions were favorable. On the contrary, the Indochinese countries were all emerging from extended periods of war and isolation. Each was also faced with extreme poverty, rudimentary infrastructure, and weak administrative capacity. At the outset, the countries attracted very limited international aid and had negligible foreign reserves.

Against this background, the Indochinese countries implemented tough macroeconomic policies that were basically similar. Initially, stabilization policies in all three countries comprised a mix of flexible exchange rates, high interest rates, limitations on state enterprise credit, and government expenditure reduction. This policy mix, in part, reflected the extensive nature of informal markets, which coexisted with the machinery of central planning and which became increasingly important as reforms took hold. Policy-makers' recognition of the pervasiveness of informal markets and the need to work with them rather than against them was a key element in the Indochinese countries' success.

Background to Reform

Prior to the reforms, the Indochinese countries faced budget

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

deficits similar to (or even larger than) those in other transition countries (see chart). The true extent of these deficits was hidden, as government revenues consisted largely of transfers from state enterprises that themselves benefited from government subsidies, while expenditures were understated by the use of over valued official exchange rates, arbitrarily low accounting prices, and the practice of paying workers in consumer goods instead of wages. Most of the early reform effort – including price liberalization, exchange rate devaluation, and monetization of in kind payments – raised measured budge deficits drastically. The situation was also made worse initially as wages were raised in part, to monetize fringe benefits. The government wage bill rose rapidly as share of GDP in Vietnam and Lao PDI until 1989, and in Cambodia well into the 1990s At the same time, tax systems a such were very rudimentary, and initial reforms led to a deterioration in the financial performance of the state enterprise reducing their budgetary transfers.

With the withdrawal and eventual termination of external assistance from the Council for Mutual Economic Assistance (CMEA) countries, the resulting large deficits were financed mainly through the printing press, and inflation escalated to triple-digit levels in each of the countries. High inflation gave a further push to informal markets and worsened the situation in the official sectors. The banking systems that existed in each of the countries had never been well established, and the lack of trust in domestic currency was reflected in flight to foreign currency and gold, and in minimal use of commercial bank accounts.

Stabilization and Growth

There are two distinct phases of stabilization policies in the Indochinese experience. The immediate policies to bring down inflation from very high levels were based on flexible exchange rate regimes combined with drastic reductions in government outlays and high real interest rates. After dealing with inflation, each country entered a second stage with policies aimed at achieving exchange rate stability, although none of the three has yet adopted a pegged exchange rate. In this second stage, greater emphasis has been placed on mobilizing revenue and rebuilding government current and capital outlays. Measures are also being taken to develop the banking system and encourage the use of domestic currency.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The early phase. The initial conditions of high inflation, increasing dollarization, low international reserves, and limited international assistance severely constrained the scope for action. The marked decline in individuals' willingness to hold domestic currency progressively narrowed the base of the inflation tax, and this made the inflationary impact of the growing fiscal deficits worse. Inflation, in turn, contributed to further overvaluation of official exchange rates, and there was an increased diversion of foreign exchange receipts into the parallel market. Because administration was weak, foreign exchange controls could not be enforced and both the public and private sectors met the bulk of their foreign exchange needs from the parallel market. While fiscal measures were clearly needed, there was no dependable tax base, and budgetary adjustment was necessarily focused on cuts in expenditure, including curtailment of subsidies to state enterprises and reduction in real public sector wages.

These actions were supplemented by curbs on public services and capital spending. Using the exchange rate as an anchor to bring down inflation – as tried in many transition economies – was not considered a feasible option in the Indochinese countries. The parallel market exchange rate was recognized as the main operational rate within the economy, and the governments of the Indochinese countries could not hope to establish a credible fixed exchange rate that would eliminate parallel market premiums and anchor their policies. Indeed, any attempt to fix the official exchange rate was thought likely to have an immediate adverse impact on foreign exchange receipts in the official market, in part because it would raise expectations of renewed foreign exchange restrictions. Without adequate reserves, the governments would be unable to defend the official rate and would lose policy credibility once the parallel market premium reemerged.

Instead, a flexible exchange rate policy was adopted that accepted the parallel rate as the dominant rate in the economy and linked the official exchange rate to it. Policy focused initially on narrowing the gap between the official and parallel rates by devaluing the official rate in response to depreciation in the parallel market. The rate of depreciation of the parallel rate was, in turn, taken as the main indicator of whether financial policies were sufficiently tight. Thus, the main burden of inflation reduction rested on fiscal and public enterprise adjustment. At the same time, there were few, if any, indexation mechanisms working in the Indochinese economies, and,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

by holding in check the public sector wage bill, the governments (particularly Vietnam) were able to effect an overall decline in real wages.

The policy of following the parallel market was one of the few practical alternatives available, given the limited institutional capabilities, negligible reserve levels, and the tremendous changes taking place as these countries moved to more market-oriented systems. Underlying the policy was the assumption that the parallel market rate would provide a reasonable guide to a real equilibrium rate for the economy and would not itself be a source of additional inflationary shocks. In the Indochinese countries, once initial stabilization policies took hold, the parallel market exchange rate tended to be relatively stable, reflecting the extensive nature of these markets. An important complementary measure in this respect was the relaxation, early in the reform process, of foreign exchange controls, which made transactions easier and reduced the distortive effects of risk premiums.

A further crucial policy element during the first stage of stabilization was the adoption of positive real interest rates during periods of high inflation. This policy was important in curbing further currency substitution in Lao PDR and Vietnam, but it was not relevant in Cambodia, where domestic currency was used almost entirely for cash transactions and no domestic deposit base developed. With high domestic interest rates, time and savings deposits denominated in domestic currency increased rapidly. The use of a high interest rate policy, together with the introduction of popular treasury savings certificates, also facilitated a switch from bank to nonbank financing of the budget deficit. As inflation began to subside, the governments reacted relatively quickly by reducing nominal interest rates, which smoothed the adverse impact of excessively high real rates on enterprise profitability. The countries also avoided any massive buildup of unrecoverable debts in the banking system, though the profitability of the state-owned banks did suffer from the combined effect of high lending rates and enterprise closures.

As in other transition economies, government revenues declined at the outset of reforms as the countries moved toward a modern tax system instead of relying on transfers from state enterprises. Thus, the only course open to the Indochinese countries to achieve fiscal

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

adjustment was to cut expenditures, mainly by lowering real labor costs, eliminating subsidies for consumers and state enterprises, and reducing capital outlays. Even though public sector layoffs were significant, the budgetary impact of severance packages was small, since state enterprises carried out most of the layoffs (notably in Vietnam) and, unlike European transition economies, neither the government nor state enterprises offered much in the way of social services. As for subsidies, in Vietnam, practically all subsidies for consumers and exporters (about 5 percent of GDP) were eliminated in 1989 in the context of price and exchange rate liberalization. A similar policy was adopted in Lao PDR, where all current budgetary subsidies were eliminated beginning in March 1988. Fiscal adjustment was supported by stricter control of bank credit to the state enterprises. This approach included allowing unprofitable enterprises to shed labor, close down, or merge with more profitable ones.

Fiscal stringency initially hit spending on public investment and social services hard. Capital expenditures fell to extremely low levels (1-3 percent of GDP) in both Cambodia and Vietnam. In Lao PDR, however, although there was also a decline, assistance from OECD countries had begun at an earlier stage, and capital outlays were maintained at 5% percent of GDP. Social services – including basic education and health care – also suffered. For example, annual spending per capita on health and education in Vietnam was suppressed to about 5,000 dong in 1989 prices (about $1) from the late 1980s until 1991. The quantity and quality of services thus regrettably deteriorated, undoing a good part of the impressive progress Vietnam had made previously. This deterioration was, fortunately, short-lived. In subsequent years, Vietnam's expenditures on education and health services increased, financed by sharp improvements in revenue performance and higher fees for public services. After the 1990-92 shock, improvements in education and the delivery of health care were documented at the grassroots level.

Consolidation

As inflation was gradually brought under control and parallel market premiums were eliminated, the policy mix was changed, although maintaining financial stability especially keeping inflation low – while sustaining rapid economic growth was still the main goal. The policy emphasis in the second stage has been on achieving

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

exchange rate stability through tight financial policies. Fiscal policies, while still emphasizing avoidance of domestic bank financing, have focused on raising revenues in order to rebuild social services and expand capital outlays. Monetary conditions have generally been kept tight, and policies have increasingly focused on promoting the use of domestic currency, particularly in Vietnam and Lao PDR.

In many respects, the experience of the countries during this second stage has become more disparate, reflecting their varying degrees of success in fiscal adjustment and in moving away from parallel market activities. At one extreme, in Cambodia, the development of a tax base is still in its early stages, and little headway has been made in reducing currency substitution. In Lao PDR, the conduct of monetary policy also continues to be complicated by the impact of dollarization on the stability of the measured demand for money. Furthermore, the foreign exchange market in Lao PDR is less formalized than in Vietnam, where an interbank foreign exchange market has developed rapidly over the past two years. Although Vietnam has made the most progress in moving toward formal markets, informal activity is still strong – there is still a large parallel foreign exchange market; foreign currency bank notes are still widely used; smuggling and border trade adversely affect tax collections; and there is a thriving informal credit network.

After the initial period of following the parallel markets, the official and parallel markets were unified in all three Indochinese countries. Official rates have generally been kept within 1 percent of the parallel market exchange rate, and liberalization of controls on the use of foreign exchange has significantly reduced the incentive to channel foreign exchange into the parallel market. Moreover, all three countries have generally been able to maintain a remarkably stable nominal exchange rate vis-a-vis the US dollar in both the parallel and official markets. Thus, although the exchange rate was not used as an explicit anchor during 1992-95 in Indochina, stable rates have been used as a guide for gauging the effectiveness (and recalibrating) of financial policies.

New institutional arrangements have also been important in promoting the use of the official foreign exchange market. Specifically, the exchange system in Vietnam moved closer to a market regime with the introduction of trading floors for foreign exchange in November 1991, followed by the establishment of an

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

interbank foreign exchange market in October 1994. As the official market expanded and captured a greater proportion of foreign exchange receipts, the official rate has more closely reflected underlying market conditions. In Lao PDR, an increasing number of banks and foreign exchange bureaus authorized to deal in foreign exchange have also helped bring a larger share of transactions into the official market. Despite these reforms, however, the parallel market still attracts the bulk of remittances and some export receipts, making it difficult to formally peg the exchange rate. Indeed, an attempt to peg the exchange rate in Lao PDR in 1995 led to increased diversion of foreign exchange receipts to the parallel market and forced an eventual devaluation of the official rate.

Fiscal consolidation

In contrast, with the first phase of adjustment, the emphasis in the second phase has been on strong revenue performance while containing current expenditure (Cambodia and Lao PDR), or even increasing spending for social purposes (Vietnam) and capital outlays (Lao PDR and Vietnam). The buoyant revenue performance mainly reflects sustained efforts to install modern tax systems and improve tax administration, coupled with the dynamic output growth, the rapid expansion of foreign trade, and financial improvement of the public enterprise sector.

Credit policy

Tight monetary policies have continued during the second stabilization phase in the Indochinese countries. Moderate growth rates of the money supply, broadly defined, have been achieved mainly through the virtual cessation of government budget financing, continued hard budget constraints on state enterprises, and keeping real interest rates at positive levels. However, all three countries continue to face problems arising from the effects of currency substitution on the stability of the measured demand for money and a general lack of monetary policy instruments with which to control increasingly sophisticated banking system.

The rapid expansion of commercial banks – evidenced by the opening of a large number of joint venture banks and branches of foreign banks – and increased public confidence in the banking system have led to a significant degree of financial deepening, which

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is generally measured by the share of broad money in GDP. This share has risen significantly in Vietnam and Lao PDR since 1991. The beginning of a similar trend has been observed in Cambodia since 1993. However, currency substitution, once it has taken place, is extremely difficult to reverse. Thus, despite the moderation of inflation, continued positive real interest rates, and stable exchange rates, only partial progress has been made toward de-dollarization.

De-dollaration

The future pace of de-dollarization is critical for the formulation of stabilization policies. This reflects the fact that, while the overall demand for money may be expected to change only gradually over time, there may be sharp changes in the measured demand for money as domestic money replaces dollar currency holdings. The progress of de-dollarization is difficult to project, since it shows up only indirectly as an increase in the foreign assets of the banking system and an increase in measured broad money. Although the shift from dollar notes to domestic money would not affect the balance of the overall demand for and supply of money, from a practical viewpoint, such shifts mean that a planned increase in the money supply can become tighter than anticipated if de-dollarization from currency notes occurs. On the other hand, if there is a reverse shift from domestic money to dollar currency holdings – which may have been the case in Lao PDR in 1995 – then the monetary program becomes looser than originally intended.

This has practical implications for exchange rate policies. As indicated above, the Indochinese countries retain market-based exchange rate systems with financial policies aimed at achieving relative stability of the exchange rate. In this context, their governments may need to be ready with a variety of policy responses if, for instance, international reserves are accumulating at the current exchange rate at a faster pace than planned. If the increase is assumed to result from de-dollarization, then the recommendation would be to accumulate additional reserves and allow additional monetary expansion as this would not have inflationary consequences. This appears to have been the situation that developed in Cambodia in 1995, when international reserves rose strongly, causing measured broad money to increase by 45 percent while prices rose by only 3 4 percent.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Among the three countries, only in Vietnam does there appear to be a reasonably firm relationship between measured broad money and prices. In the other two countries, substantial shifts from dollar currency holdings to domestic money (or in the reverse direction) can be expected to take place.

In addition to the complications of formulating and quantifying monetary policy, the Indochinese countries need to develop new monetary policy instruments. With private sector credit becoming increasingly important, and with banking systems becoming more extensive and diversified, reliance on instruments such as central bank refinancing and moral suasion has proved insufficient to control overall credit expansion. For this reason, explicit bank-by-bank credit ceilings were adopted by Vietnam in early 1994 and by Lao PDR in June 1995. Using such direct instruments, however, has led to a buildup of excess reserves in the commercial banks and spurred fresh disintermediation from the banking system. Efforts to put in place more efficient indirect instruments of monetary management have therefore been given priority. In each of these countries, initiatives are under way to strengthen government securities markets and to relax administrative controls over interest rates.

The Future

Since the initial periods of rapid disinflation, each of the Indochinese countries has done well in keeping inflation under control and maintaining relatively stable exchange rates. Tight financial policies have been helped by successful efforts toward revenue mobilization through revamped tax systems, and fiscal deficits have been covered mainly in a non-inflationary way, by drawing on external assistance and nonbank domestic sources. Monetary policies have also been restrained, with the notable exception of Lao PDR in 1995, when attempts to expand credit and hold the exchange rate stable immediately gave rise to the reemergence of dollarization and a parallel market premium.

Although reforms are far from complete, the experiences of the Indochinese economies should not be interpreted as supporting a "gradualist approach" to adjustment. On the contrary, the countries adopted comprehensive adjustment policies, which helped achieve both favorable growth and disinflation results within a relatively short period, thus challenging the view, held by some observers of the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

experience of the transition economies, that gradual liberalization is necessary to avoid an output collapse.

For the future, stabilization policies in the Indochinese countries will have to come to grips with a new environment that will require different policy responses and the development of more efficient and sophisticated policy tools. In particular, the countries will have to deal with the overheating problems that accompany strong growth; at the same time, they will have to take into account substantial inflows of external assistance and foreign capital, uncertainties over de-dollarization, and increasing integration into the world economy.

This article is based on a report prepared by John R. Dodsworth, Ajai Chopra, Chi D. Pham and Hisanobu Shishido entitled *Macroeconomic Experience of the Transition Economics in Indochina*, IMF Working Paper 96/112, Washington, International Monetary Fund, a version of which was subsequently published under the title *How Indochina's Economies Took Off* in Finance and Development, March 1997.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Tibet: Endurance of the National Idea

Stephen R. Bowers
and
Eva M. Neterowicz

CONTENTS

TIBETAN SOCIETY AND CULTURE
TIBET ENTERS THE 20TH CENTURY
THE CONSOLIDATION OF CHINESE CONTROL
THE TRANSFORMATION OF TIBET
TIBET IN THE POST-MAOIST ERA
THE TIBETAN CRISIS IN THE POST-COMMUNIST ERA
OPTIONS FOR RESOLUTION OF THE TIBETAN CRISIS
APPENDIX
MAP

ISBN 0-930690-52-4 – Paperback, 128 pages
Price: $15.00
VISA AND MASTERCARD ORDERS ACCEPTED

JOURNAL OF SOCIAL POLITICAL & ECONOMIC STUDIES
MONOGRAPH SERIES
Monograph Number 23

Council for Social & Economic Studies
1133 13th St., N.W., Suite C-2
Washington D.C., 20005
Tel: (202) 371-2700 Fax: (202) 371-2500

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Population Differentials: A View of the 21st Century Through a Coarse Biocultural Filter

Forest Morrisett
Wade C. Mackey
Southeastern Community College, West Burlington, Iowa

While the disparate reproductive rates which characterize the various populations of the contemporary world are well know, few ponder the highly significant evolutionary aspects todays demographic statistics.

Key Words: Demography, fertility, education, motherhood

While *Homo sapiens* is a wondrous species that can perform many diverse and fascinating feats, it cannot transcend several basic precepts of the natural order. For any human to be alive at all, impregnation, gestation, and infant care-taking must occur. If any of these three activities do not occur successfully, then the individual will not be alive to experience puberty. If any human does manage to remaine "alive" at one point in time, then that same individual will die at a subsequent point in time. Immortality occurs only in the imagination of *Homo sapiens,* not in its quiver of objective options. At the barebones, humans are quite as subject to "natural selection" as any other species. This (re)statement of such verities is not intended to be a novel insight. However, occasionally, a reminder might trump an inspiration. And the basics are often worth re-visiting.

This paper surveys *Homo sapiens,* and profiles a question of priorities which each breeding population, micro- or mega-, must adjudicate.

Darwinian Evolution

A basic tenet to Darwinian evolution is that some members of a population may propagate more offspring than alternate members of that same population. If so, then, were death rates to remain the same, whatever inheritable traits that the more profligate members

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

possess will increase their representation in the next generation. Again, humans are not transcendent to this tenet. To imagine otherwise is to incubate mischief.

The questions to be addressed become "Is human propagation reasonably equal across the world's community of cultures?" And, if not, is the lack of identity to be worthy of any notice? This paper argues "no" to the first and "yes" to the second.

Methods and Results

From the U.N. data bases, crude birth rates, crude death rates, and rates of natural increase were surveyed across the large land masses of Africa, the Americas, Asia, Europe and Oceania (1990-1995) (United Nations 1995; Smith, Morris 1990). The levels of natural increase were unequal across these entities. (See Table 1)

The highest rate of natural increase at 2.8% per (Africa) was 14 times the increase of Europe at 0.2% per year. Thus, it must be the case that whatever generalized biocultural mosaic has generated the African advantage would be more represented in subsequent generations than would be the generalized European mosaic. The other areas of the planet would be intermediate.

A survey of the extremes in the rates of fertility, as measured by lifetime births per woman, also illustrates a lack of demographic homogeneity across the world's community of cultures. The countries with the 10 highest fertility rates average 7.37 children per woman. Seven of the 10 are from sub-Saharan Africa and the remaining three are from Moslem countries in the Middle East. The countries with the 10 lowest fertility rates average 1.51 children per woman. All ten countries were from Europe (Smith-Morris 1990). See Table 2. This figure of 1.51 is significantly lower than the highest 10's average of 7.37 ($t[18] = 38.3$; $p < .001$; 2-tailed).

Next, let us use a more finely grained filter and divide Africa into two segments: Sub-Saharan Africa and northern Africa. Added to the countries of northern Africa (Morocco, Egypt, Algeria, Tunisia, Libya) are the Middle East countries of Yemen, Saudi Arabia, Iran, and Iraq to form a Moslem swathe ($n = 9$).

For both the Moslem swathe and Sub-Saharan Africa, the natural increase was approximately 2.9%. This rate was 81% higher than the world's average of 1.6%. This differential again illustrates the dynamic that different sub-groups are more evolutionary successful

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 1

Demographics (population, birth rates, death rates and rates of natural increase) for six areas of the world: Africa, Latin America, North America, Asia, Europe and Oceania plus Total) for the years 1990-1995 (United Nations 1995)

AREA	Population (millions) (1993)	Mean crude birth rate[a]	Mean crude death rate[b]	Mean rate of natural increase
World	5,544	25	9	1.6%
Africa	689	42	14	2.8%
Latin America	465	26	7	1.8%
North America	287	16	9	1.0%
Asia	3,350	25	8	1.6%
Europe	726	12	11	0.2%
Oceania	28	19	8	1.5%
Mean [unweighted] (n = 6)		23.3	9.5	1.5%
s (n = 6)		10.6	2.6	0.9%

[a] Number of births per 1,000 population

[b] Number of deaths per 1,000 population

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 2.

Highest (top 10) and lowest (bottom 10) fertility rates (mean number of children per woman) by country and geographical area (Smith-Morris 1990, United Nations 1990).

Highest fertility:				Lowest fertility:			
Rank	Country	Fertility	Area	Rank	Country	Fertility	Area
1	Rwanda	8.29	Africa	1	West Germany	1.38	Europe
2	Kenya	8.12	Africa	2	Denmark	1.45	Europe
3	Cote d'Ivoire	7.41	Africa		Netherlands	1.45	Europe
4	Zambia	7.20	Africa		Italy	1.45	Europe
5	Oman	7.17	Asia		Luxembourg	1.45	Europe
	Saudi Arabia	7.17	Asia	6	Austria	1.50	Europe
				7	Switzerland	1.55	Europe
	Jordan	7.17	Asia	8	Belgium	1.55	Europe
8	Niger	7.10	Africa	9	Finland	1.65	Europe
	Tanzania	7.10	Africa	10	Sweden	1.65	Europe
10	Nigeria	7.00	Africa				
Mean		7.37				1.51	
s		0.45				0.09	

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 3.

Migration patterns by type of region (net receiving vs. net sending) and by the top ten countries with the highest rates of net international immigration (1985-1995) (Martin & Widgren 1996).

Top 10 Countries	Population growth (in percent) due to immigration	Type of Region: Sending	Receiving	Mean Annual net migration
Germany	122%	Africa		63,000
Greece	86%	Asia		1,366,000
Austria	86%	Latin America		392,000
Switzerland	69%		Europe	739,000
Israel	48%		North America	971,000
Australia	47%		Oceania	111,000
Canada	41%			
Gambia	37%			
United Arab Emirates	29%			
Gabon	28%			

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 4.

Enrollment (total and female-only) in percentages by area of the world and by level of education (primary, secondary, and tertiary) (1975 and 1990) (UNESCO 1994).

Area/year	Total enrollment (%)			Female-enrollment (%)		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Africa						
1975	7.1%	8.8%	2.4%	8.2%	3.2%	1.5%
1990	10.9%	13.0%	4.2%	12.7%	7.7%	2.9%
Americas						
1975	17.7%	17.4%	41.1%	18.9%	16.4%	44.5%
1990	17.3%	17.7%	35.8%	18.6%	14.3%	41.6%
Asia						
1975	55.9%	60.5%	22.9%	58.4%	44.9%	16.9%
1990	56.6%	58.3%	33.0%	57.0%	30.7%	26.0%
Europe						
1975	12.2%	8.7%	19.8%	9.6%	21.7%	20.4%
1990	9.4%	6.3%	17.7%	6.7%	15.4%	19.3%
Oceania						
1975	0.6%	0.5%	1.0%	0.5%	0.9%	0.9%
1990	0.5%	0.5%	1.0%	0.5%	0.7%	1.2%

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

TABLE 5.

Birth expectations of women by educational attainment in 1982 (from Bianchi & Spain 1986) and 1992 (U.S. Bureau of the Census, 1995).

Year/Age and years of School completed	Births to date	Percentage expecting no births
1982		
Total, Ages 18 - 34 years	1.1	11.6%
Not high school graduate	1.7	8.7%
High school, 4 years	1.2	10.3%
College, 1 to 3 years	0.8	13.1%
College, 4 years	0.6	15.7%
College, 5 years or more	0.6	18.7%
1992		
Total, Ages 18 - 34 years	1.1	9.3%
Not a high school graduate	1.8	7.6%
High school, 4 years	1.3	9.0%
College, 1 to 3 years	0.8	10.0%
College, 4 years	0.7	10.3%
College, 5 years or more	0.6	12.0%

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

than alternate groups. An explication of the specific mechanisms which are driving the Moslem versus the Sub-Saharan African data is beyond the scope of this exercise. Whether similarity or dissimilarity is the final judgment awaits further inquiry. In either case, the two areas represent examples of current evolutionary "successes", especially when compared to Europe.

A European Example

Next, let us examine the recent demographics of Germany (from Europe). In 1990, Germany's crude birth rate was 10, and the crude death rate was 11 (United Nations 1995). Hence, Germany's rate of natural increase was negative (-0.1% per year). Of interest is the composition and the trends of the births that did occur. Germany is a country which receives a large number of immigrants. The immigrants, by definition, are not native Germans. These individuals bring with them their own biocultural heritages into the new land They marry either each other or native Germans, and have children. The trends are interesting for both marriage patterns and for birthing patterns.

In 1950, 95.4% of the marriages in Germany were between two Germans. The remaining 4.6% of the marriages involved at least one non-German (1.0% two non-Germans, 2.9% a German bride and a non-German groom, 0.7% a German groom and a non-German bride). However, by 1990, only 88.8% of the marriages were between two Germans, and 11.2% of the marriages involved at least one non-German (1.6% two non-Germans, 5.3% a German bride and a non-German groom, and 4.3% a German groom & a non-German bride). The proportion of marriages involving non-Germans more than doubled in the forty year gap (*Statistisches Bundesamt* 1992).

The same pattern of change is found in births. In 1960, 92.5% of the births in Germany were of German parents (another 6.3% of the children were born to single mother Germans). Two percent of the children were born to parents involving at least one non-German (0.1% a German father & a non-German mother, 0.7% a German mother & a non-German father, and 1.2% to non-German mothers [either a single parent or with a non-German father]). By 1990, the percentage of births to two German parents dropped to 73.5% (another 9.5% were born to single German mothers). By 1990, the percentage of births involving at least one non-German rose to 16.9%

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

(2.2% a German father & a non-German mother, 2.B% a German mother & a non-German father, and 11.9% to non-German mothers [either a single parent birth or with a non-German father)). Hence, the proportion of births involving non-Germans increased more than 8-fold in the thirty year gap (*Statistisches Bundesamt* 1992).

In addition, when fertility rates, as measured by children ever born (live) per thousand women, are used as the index, a similar picture emerges. In 1970, the fertility rate was 2010 lifetime births per 1000 German women and 2176 for non-German women. That is, the rate was about 8% higher for non-German women. By 1990, the rate for German women dropped to 1420 lifetime births and the rate for non-German women had dropped to 1900; yet was nearly a third higher than that of German women (Statistisches Bundesamt 1992).

Migration Patterns

At base, Europe receives more immigrants than it sends; whereas Asia and Africa send more emigrants than they receive. Both genetic and cultural diffusion are occurring simultaneously. Again, with Germany as an example, a hefty 128% of Germany's growth is due to immigration (Martin & Widgren 1996). See Table 3 for other examples of migration affecting growth rates. Framed a little differently, the current German culture, as a variation, and European culture, as a theme, are both cultural equivalents to the California condor in terms of expected longevity.

A Cultural Explanation

If it can be agreed that differential rates of natural increase (i.e. evolution) *are* occurring, then the differentials need to be explained. Although humans are big-cultural beings, in this instance, the "bio-" part of humanity seems an unpromising candidate to explain the differentials. With the exception of twinning (Taffel 1995, Derom, Orlebeke, Eriksson & Thiery 1995), the fertility (i.e. ability to conceive, ability to gestate, ability to give birth) of women seems more homogeneous, across cultures, than otherwise. Plus the ability to lactate seems more equitable than not across the planet. Accordingly, the large differences in birth rates seem more a result of "cultural" differences than of physiological differences.

The commitment of *Homo sapiens* to being "cultural" and in creating a "culture" may be difficult to over-estimate. As the bird is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

to the nest and the spider is to the web and the beaver is to the dam, humans become human when they create their own culture. Geertz's (1974) notion that people create a culture in which they suspend themselves is relevant here. Culture is not a mere overlay or superficial veneer to human behavior. "Culture" is – for humans – inherent, intrinsic, and innate.

Thus, if cultural differences were to become a reasonable candidate to explain the differentials in natural increases among the groups being compared, what facets of the cultures might be pre-potent in generating these differentials? It is suggested here that the lifestyle options available to women is a powerful variable which impacts upon their fecundity which may be writ small per individual, but which would be writ large for the community's competitive viability.

Framed differently, if status-role complexes *other than motherhood* are systematically precluded from women, then births would be expected to be higher than if motherhood were simply one lifestyle of many which could be freely chosen by each and every woman. Conversely, if no such preclusion of non-motherhood status-role complexes is in existence, then birthrates would be expected to decrease – i.e. motherhood would be relatively diminished as a lifestyle prerogative.

If the above has a kernel of truth, then such putative patterning of lifestyle and birth rates ought to exist and ought to be findable across cultural boundaries.

Women's Options and Birth Rates: A Test

A basic index to life-style options is higher education: the higher the level of education, the more choices are afforded the graduate. Thus, the percentage of women (rather than men) engaged in tertiary (e.g. college) education in relationship to birth rates was surveyed across cultures which collected data on both indices ($n = 117$) (Smith-Morris 1990, United Nations 1990). The results were significant ($rp = -.64$, $p < .001$; 2-tailed) and in the predicted direction. As the percentage of women (rather than men) enrolled at institutions of tertiary education increased, the birth rates (number of children born per 1000 population) decreased. Note that over 40% ($.64 = .4096 = 41\%$) of the variance in birth rates can be accounted for by changes in the percentage of women in tertiary education.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Thus, even when all the vagaries and logistical problems of comparing indices across cultural boundaries are considered, the relationship is surprisingly robust.

Correlation coefficients (such as rp), of course, cannot demonstrate causality. And there are three basal interpretations available to the significant correlation: (1) changes in birth rates are driving women's educational achievements, or (2) changes in educational levels are driving birth rates, or (3) a third variable is driving both of the other two variables: birth rates and educational level.

The first option – changes in birth rates are driving educational achievement – seems, at face value, implausible. Functional sterility would not be a reasonable explanation why women would increase their pursuit of higher levels of education. The second – changes in education levels are driving birth rates – has a ring of common sense to it. Being a full time student seems incompatible with the care-taking of young children, certainly of more than one child. See Brown 11970] and Murdock & Provost 11973] for discussions on the relationship between the type of task and the duties of an infant child-caretaker). However, the question would remain: "Why bother to be a higher level student?" The answer proffered here is that the education achievements are translated by the women into occupational and income mobility. And, indeed, other surveys have documented that when women do have an opportunity to enter into a cash occupation, they do just that. For examples and discussion, see Caldwell (1982), Easterlin & Crimmins (1985), Handwerker (1986), Fawcett (1983), Day & Mackey (1986), cf. Aghajanian (1977, 1988), Bradley (1984), Nag, White & Peet (1978), Ross & Harris (1987). Thus, it is suggested that the drive-wheel for the robust correlation between birth rates and levels of women to be involved in occupations which require a heavy investment in the educational process.

The question then becomes: Are there patterns across the coarse land masses in differential entry into tertiary education by women? The answer seems to be "Yes".

In 1990, Africa contained about 12% of the world's population, 10.9% of total world's primary students, 13% of the world's secondary students, but only 2.9% of the world's female enrollment in tertiary education. In contrast, Europe, in 1990, contained about 15% of the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

world's population, and about 9.4% of the total enrollment in primary education, but had 19.3% of the women enrolled at

the level of tertiary education (UNESCO 1994). Thus, women in tertiary institutions of learning were under-represented in Africa and *over*-represented in Europe. Again, Africa has a 14 fold advantage in natural increase when compared to Europe. Similarly, the America, about 14% of the world's population, had about 17.3% of the world's children enrolled in primary education, but 41.69/0 of the women enrolled in tertiary education. Again, when the Americas are compared to Africa, the women are under-represented in Africa and over-represented in America. Africa (at 2.8%) has an advantage in natural increase over the Americas, both North America (at 1.0%) and Latin America (at 1.8%). In the Americas, Europe, and Oceania, women outnumbered men in tertiary education. In Africa and Asia, the reverse occurred, men out-numbered women in tertiary education (UNESCO 1994). See Table 4.

Discussion

It is argued here that (a) different sub-groups of *Homo sapiens* have different levels of natural increase than other sub-groups of *Homo sapiens,* (b) the differences lay more in the cultural make-up of the different sub-groups than in the/any biological make-up of the different sub-groups, and (c) part of the generalized cultural mosaic which is aligned with a higher rate of natural increase – i.e. Darwinian success – is the restriction of female options. It is similarly argued that the route to the putative restrictions is not germane. The route could be male-driven, or female-driven, or elder-driven, or consciously driven or unconsciously-driven, or charismatic individual-driven or committee-driven. The end result would be the same. Enhanced numbers of options for females result in fewer births by those females and, by extension, a lower (even negative) level of natural increase.

Of methodological interest are the studies, surveys, and analyses vis-avis mating strategies/tactics of European and North American women. While such studies have an obvious value, these inquiries are also clearly quite limited. A profile of a group that systematically averages less than two children per female is a profile of a dysfunctional group. A sample of female college students is probably an extremely poor barometer of successful reproductive histories.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Although such samples are the most easily accessible, they also have exceedingly poor predictive validity for the species. Qualities of attraction between the genders – a qualitative analysis – should not be equated with numbers of children per woman – a quantitative analysis. Darwinian evolution, at the bottom line, operates on quantity, not quality.

The U.S. mega-tribe serves as a good, if not perfect exemplar. In the U.S., an increase in the level of education is clearly associated with a decrease in births. More education is aligned with more options and with fewer children. This negative relationship has held true for a number of years. See Table 5.

Sub-groups of the American mega-tribe of Caucasian whites which have elevated birth rates (with low death rates) and high level of natural increase include the Amish, the Mormons, the Hasidic Jews, and the Hutterites. In each of these sects, the women are precluded from political and economic power structures (Hostetler, 1974, Kraybill, 1993, Kraybitt & Olshan 1994, Nonaka, Miura & Peter 1994, Wasao & Donnermeyer 1996). For example, in the Mormon Gospel Principles (1978, pp. 228-229), under the sub-heading of "the responsibility of the father," the following is taught: "The father is the patriarch of the family and has important responsibilities that are his alone. He is the head of his home and the leader of his family... It is also the father's duty to earn the living for his family. He should provide the necessary food, housing, clothing, and education." For the "responsibility of the mother", it is noted that "motherhood is woman's noblest calling.... A mother's most important responsibility is to bring children into the world and to care for and teach them. Bearing children is one of the greatest of all blessings. To refuse to do so is a serious sin."

Summary

Which types of *Homo sapiens* will dominate the species in the 21st and 22nd century? Thematically, the descendants of women with the most children will dominate the species. Any other option has a real problem with a supportive theory. More specifically, if current trends can be extrapolated into the future – and induction has, in the past, proven useful – then cultural "rules" which constrain women's choices and options, will be the dominate cultural types. On the other side of the coin, those "tribes" whose cultural rules maximize

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

women's choices will, in perpetuity, be error variance. More succinctly – at present – it seems that a tribe can 'choose' to have children or gender equality, but not both at the same time.

References

Aghajanian, A.
1979 Economic contribution of children and fertility in urban Iran: An overview. *Journal of South Asian and Middle Eastern Studies* 3: 211-230.
1988 The value of child in rural and urban Iran: A pilot study. *Journal of Comparative Family Studies* 19: 85-98.

Bianchi, S. M. & Spain, D.
1986 American women in transition. NY Russell Sage Foundation.

Bradley, C.
1984 The sexual division of labor and the value of children. *Behavior Science Research* 19:159-185.

Brown, J. K.
1970 A note on the division of labor. *American Anthropologist* 72: 1073-1078.

Caldwell, J. C.
1982 *Theory of Fertility decline.* NY: Academic Press.

Day, R. D. & Mackey, W. C.
1986 Children as resources: A cultural analysis. *Family Perspective* 20: 25 1 -264.

Derom, R., Orelebeke, J., Eriksson, A. & Thiery, M.
1995 Theory of multiple births in Europe. In Multiple pregnancy: Epidemiology, gestation and perinatal outcome. (Eds.) L. G. Keith, E. Papiernik, D. M. Keith & B. Luke. NY: Parthenon, pp. 145-162.

Easterlin, R. A. & Crimmins, E. M.
1985 *The fertility revolution: A supply-demand analysis.* Chicago: U. of Chicago Press.

Fawcett, J
1983 Perceptions of the value of children: Satisfaction and costs. R. A. Bulatao, R. D. Lee, P. E. Hollerbach & J. Bongaarts (eds.) *Determinants of fertility in developing countries*. NY: Academic Press, pp. 429-444.

Geertz, C (ed.)
1974 *Myth, symbol, and culture* NY: Norton.

Gospel Principles
1981 Gospel Principles. Salt Lake City, Utah: The Church of Jesus

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Christ of Latter-Day Saints.

Handwerker, W. P.
1986 The modern demographic transition: An analysis of subsistence choices and reproductive consequences.*American Anthropologist* 88: 400-417.

Hostetler, J. A.
1983 *Hutterite Life.* Scottsdale, PA: Herald Press.

Kraybill, D. B. (ed.)
1993 *The Amish and the State.* Baltimore: Johns Hopkins Press.

Kraybill, D. B. & Olshan, M. A. (eds.)
1994 *The Amish struggle with modernity* London: University of New England.

Martin, P. & Widgren, J.
1996 International migration: A global challenge. *Population Bulletin* 51: 6-17.

Murdock, G. P. & Provost, C.
1973 Factors in the division of labor by sex: A cross-cultural analysis. *Ethnology* 12: 203-225.

Nag, M. White, B. and Peet, R. C.
1978 An anthropological approach to the study of the economic value of children in Java and Nepal. *Current Anthropology* 19: 293-306.

Nonaka, K., Muira, T. & Peter K.
1994 Recent fertility decline in Dariuslout Hutterites: An extension of Eaton and Mayers' Hutterite fertility study. *Human Biology* 66: 41 1-420.

Ross, E. B. and Harris
1987 *Death, sex, and fertility: Population regulation in pre-industrial and developing societies.* NY: Columbia U. Press.

Smith-Morris, M (ed.)
1990 *The Economist book of vital world statistics.* NY: Times Books.

Statistisches Bundesamt
1992 *Wirtschaft und statistik.* Stuttgart: Metzler-Poeschel.

Taffel, S. M.
1995 Demographic trends in twin births: USA. In Multiple Pregnancy: Epidemiology, gestation, and perinatal outcomes. (eds.) L. G. Keith, E. Papiernik, D. M. Keith & B. Luke. NY: Parthenon, pp. 133-144

UNESCO
1994 *Statistical yearbook.*NY: United Nations. United Nations.
1990 *Demographic yearbook.* NY: United Nations.

United Nations
1995 *Demographic yearbook.* NY: United Nations.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

U.S. Bureau of the Census
1995 *Statistical abstract of the United States: 1996* (16th ed.) Washington, D. C. Government Printing Office.
Wasao, S. W. & Donnermeyer, J. F.
1996 Analysis of factors related to parity among the Amish in Northeast Ohio. *Population* 50: 235-246.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BOOK REVIEW ARTICLE

Income, Intelligence, Social Class and Fertility

Edward M. Miller
University of New Orleans

Dysgenics: Genetic Deterioration in Modern Populations
Richard Lynn
Praeger, 1997

Professor Lynn's *Dysgenics: Genetic Deterioration in Modern Populations* reviews the evidence that those of lower intelligence and poorer character are having a disproportionate fraction of the children in modern societies. Lynn, one of the world's leading experts on intelligence, is a retired professor of psychology (Ulster University in Northern Ireland). Although the most obvious audience for the book is those who are interested in eugenics, the book's extensive compilation of data on fertility by intelligence, educational level, and social class should make it of interest to demographers, and those in related fields dealing with population and social stratification. Even though Lynn leaves a strong impression that genetic deterioration is a problem that something should be done about, the book does not proceed to discuss the difficult subject of how a eugenics program might be implemented. This article will summarize the major findings of the book and then end with some comments on possible eugenics programs.

The individual chapters in Lynn's book are relatively non-controversial. Chapters survey what types of parents are having the most children (demography), document what traits contribute to success in live (economics, sociology), and show that many of these traits have a genetic component (behavior genetics). The chapters in each of these areas might be profitably read by the relevant specialists, who would find much material concisely set out (often in the form of tables). As three short monographs on different subjects, this work would create relatively little controversy or opposition. However, when all of this material is put together, a case emerges that current patterns of fertility are dysgenic, and the implication that eugenics may be a good idea will prove to be controversial (even

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

though there is no discussion of how such a program might be conducted).

The term eugenics was proposed by Galton for consciously designed selection by which human societies would control and improve their own genetic quality. In contrast, the term "dysgenics" (the genetic deterioration that eugenics was meant to used to correct) in this book's title is quite recent, having been proposed by the Nobel Prize winner Shockley in 1974.

Today eugenics is regarded as almost a dirty word in some circles. It was not always that way. Darwin himself wrote that "Both sexes ought to refrain from marriage if they are in any marked degree infirm in body or mind". Karl Pearson, who invented the correlation coefficient and did early work on the heritability of intelligence, became concerned that the less fit were more fertile and wrote, "The only remedy, if one be possible at all, is to alter the relative fertility of the good and the bad stocks in the community". Lynn points out how at one time eugenics was supported by the leading scientists of the time. The reader who wants more on the history of the eugenics movement may want to consult Pearson (1996), who has discussed the history of the eugenics movement in more detail. Pearson's book was reviewed and summarized in this journal (Miller, 1996).

Lynn believes that till recently natural selection functioned to at least maintain the intelligence and character of the population. He argues that in hunter-gatherer times the band's leaders had more children, and suggests that intelligence was one trait that led to leadership. The obvious question is, with prolonged selection for intelligence, why have any genes for stupidity survived? Elsewhere (Miller, in press), I have argued that during the process of natural selection slowly raising intelligence, there will be a wide range of intelligences in the population. When, the smartest people have reached the level where science and literature appear (including psychometrics), there will still be many carrying the genes for low intelligence.

One of this book's strong points is the tables summarizing the literature on how fertility differs in various ways. The first of these (Table 2.1) summarizes a series of studies of pre-industrial European fertility, showing that the middle classes had greater reproductive success. Lynn argues that even then that the more intelligent and more conscientious tended to move into the middle classes. The case

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is very plausible for intelligence, but there remains the possibility that "nice guys finish last", and that the less conscientious rose in the social hierarchy at the expense of the conscientious. History provides many examples of power being achieved by the treachery and wealth by dishonest means. Also, it is plausible that the less conscientious more often took advantage of opportunities to father illegitimate children. Lynn does present evidence (p. 33) that death rates were much higher among the illegitimate in the pre-welfare state era when unwanted babies were frequently abandoned.

Lynn also fails to discuss the evidence that in the pre-industrial era disease rates were higher in the cities and fertility lower. The cities are where many intelligence requiring occupations (trade and administration in particular) were concentrated. Thus, even if within the rural and urban areas, the middle classes enjoyed greater reproductive success, it is possible that for society as a whole there was no selection for intelligence in the pre-industrial era.

Lynn argues that the previous selection for intelligence and character had been weakened by a breakdown of natural selection following the industrial revolution. He documents the major reduction in mortality that has occurred in the industrial world. For instance, the Swedish child mortality went from 43% in 1750 to 5% in 1950. He argues that in preindustrial periods the lower classes had disproportionately high mortality (as they continue to do today). As a result, the massive reduction in mortality greatly reduced the absolute value of the difference in death rates between the social classes. Today, mortality before the completion of child bearing is rare. As a result in the race to reproduce, the higher classes' advantage from lower mortality has been virtually eliminated.

Lynn presents evidence that the demographic revolution (the reduction in the birth rate) with development occurred several decades earlier among the educated classes than among the uneducated. He attributes this to several books describing birth control methods. These led to the adoption of birth control among the reading classes before its adoption by the less literate classes.

He argues that a major reason for dysgenic fertility today is contraception. Many unplanned births occur, but these are disproportionately among the less educated. For the United States, the Kost & Forrest (1995) analysis of the National Survey of Family Growth reported that 36% of births were unplanned. For those with

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

less than twelve years of education, 58% of the births were unplanned versus only 27% among college graduates. This is attributed to greater intelligence and to what Lynn calls character (the ability to defer gratification) among the more educated. The situation is argued to be similar in other countries.

Lynn argues that the rise of the welfare state has increased dysgenic fertility. Pre-welfare state women who had illegitimate children had a very hard time raising them. Women knew this and illegitimacy was rare (under 5% of births). He argues that because the women who have illegitimate babies tend to be of low intelligence, that the removal of this social pressure had a dysgenic effect. He quotes (p. 46) data from the Bell Curve (Herrnstein & Murray, 1994) to show that today the IQ of the long term welfare-dependent single women is 92, and from another source (Zill et al, 1991) that over half of the welfare dependent mothers are in the bottom 20% of the population for educational attainment. It is argued that till recently the social stigma of having a child outside of marriage and lack of government welfare for single mothers would have prevented many of these births.

There is a chapter on genetic deterioration resulting from the greater survival of those with genetic defects. It is pointed out how some genetic diseases which once prevent reproduction (either by death, disability, or mental retardation) are now treatable, and hence can be expected to gradually increase in frequency. The percentage increase per generation is estimated to be 26% for hemophilia, 120% for cystic fibrosis, and 300% of phenylketonuria (his data are from Modell & Kuliev, 1989). However, since these diseases are relatively uncommon, the total effect on health is likely to minor.

There is a discussion of the possible eugenic effect of sexually transmitted diseases. Lynn is of the opinion that they exert an eugenic effect, citing evidence that these diseases are most common among those of low socioeconomic status.

Some of the earliest concerns about dysgenic fertility were raised by studies relating IQ to the number of siblings. Soon after the development of IQ tests it was found that children in large families had lower IQ's, which was typically interpreted as evidence that the less intelligent parents were having larger families. Lynn tabulates the results of 17 such samples, all of which showed a negative correlation between number of siblings and IQ. Calculations from such data led

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

many at the start of the century to express concern about genetic deterioration.

One of the early objections to this methodology was that there was no allowance for the childless. If those of low IQ had no children at all, possibly because they could not get spouses, there could be selection for intelligence even though low IQ parents had larger families. Lynn then reviews studies (tabulated in his Table 5.4) showing that the childless tend to be of above average IQ.

Another possible objection is that the lower IQ's in large families was for environmental reasons. A plausible theory is that when parents have to divide their time among a number of children, each child receives less time. This might affect the children's intellectual development. As evidence against this Lynn mentions studies where only children had IQ's below that of children in two or three child families. A more powerful test is provided by studies of adopted children where there was not a statistically significant negative effect of family size on IQ (see Scarr and Weinberg, 1978).

Lynn reports a study of his own showing that in Britain there is still a negative correlation between number of siblings and intelligence. He calculates to that this implies a rate of decline of .8 IQ points per generation, which is lower than the estimates of 2 IQ points per generation he makes for the UK cohorts born around 1915.

A better method (when data is available) for examining changes in the genotype over generations is comparisons of the IQ's of children with those of their parents. Reviewing the major studies, he concludes that several early ones from the sixties that showed little dysgenic effects (Higgins, Reed, and Reed, 1962, Bajema, 1963 and 1968, Waller, 1971) reflect poor sampling, possibly combined with studying a cohort where the dysgenic fertility effect was very weak. The studies with better sampling do show a dysgenic effect.

Of particular interest is Vinings' studies (1982, 1995) which include data on desired family size. Desired family size appears to vary little with intelligence, while actual family size is larger in the less intelligent. This is consistent with the theory that much of the observed dysgenic fertility is due the less intelligent more often failing at birth control. However, a study by Van Court and Bean (1985) showed an inverse correlation between planned family size and intelligence. However, even here the correlations were weaker than

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with the number of actual children, suggesting that some part (Lynn calculates 25%) of the dysgenic fertility is due to the less intelligent more often failing at birth control. In this study, as in other studies, fertility is less dysgenic for women than for men, probably reflecting the greater attractiveness of a career for highly intelligent women, and their difficulty in finding what they regard as suitable mates.
This chapter documents that dysgenic fertility is greater among blacks than among whites (an effect Shockley had been strongly criticized for drawing attention to, see Pearson, 1992). Three studies are summarized in which the inverse correlation of number of children with IQ was found to be appreciably larger for blacks than for whites. For instance, one study (Broman et. al, 1987) with 17000 white babies and 19,000 black ones, found an inverse correlation of -0.22 for blacks and of -.12 for whites. The reasons for this are not really discussed by Lynn, but may be related to the relatively greater educational and occupational success of black females, and the resulting difficulty middle class black women have in finding what they regard as suitable spouses. Miller (1994) has offered an evolutionary theory for why black women are relatively more successful economically than black men.

Lynn reviews the Europeans studies from England, Scotland (Maxwell 1969), Greece (Papavassiliou, 1954), Sweden (Nystrom et al, 1991) of fertility and intelligence. They show a similar relationship to the US pattern of dysgenic fertility.

An obvious prediction from the US and European studies showing that the less intelligent have fewer children is that intelligence will decline over time. However, Lynn reports that actually IQ test performance has improved over time rather than declined. While there is general agreement that test scores have increased (Flynn, 1987), there is disagreement as to why. Some argue it is increasing test sophistication. However, the improvement is also found in pre-schoolers who have not yet been exposed to testing. Some argue that a major increase in functional intelligence would have been noticed by college professors and others. Lynn argues that the improvement is real. The improvement seems to have been small among the high income groups that go to universities (Lynn & Hampson, 1986: Teasdale & Owen, 1989), where the increased performance would have been noticed. The higher performance among the lower IQ groups is consistent with an environmental

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

improvement benefiting the lower IQ groups.

Lynn argues the improvement is due to better nutrition (as he did in Lynn, 1990) for several reasons. Studies of twins show that the larger one at birth (better nourished) typically has the higher intelligence. This advantage shows up most on nonverbal and visuospatial abilities. He argues if it was schooling, exposure to TV, etc., that it would show up more in verbal abilities. That the improvement shows up in young children, four to six year olds (Flynn, 1984), and in development quotients for those younger (Lynn, 1990), suggests it is not due to schooling, since schooling has not yet begun. There is evidence that over time birth weights (Gruenwald et al, 1967) have increased (presumably including the brain weight at birth) and there is evidence that larger brains are smarter (Rushton & Ankney, 1996; Willerman et al., 1991). That the improvement is smallest for the those with the highest IQ is consistent with the elimination of a nutritional deficit that affected the lower classes, and was eliminated as economic development raised standard of living and nutrition. The evidence is that adoptees in the same family are uncorrelated for adult intelligence (Scarr & Weinberg, 1978; Teasdale & Owen, 1984). This suggests little lasting effects of most childhood environmental factors (Lynn fails to note the possibility of environmental factors that continue into adulthood such as TV or greater job stimulation, or that much of the evidence for rising IQs come from childhood tests).

Of course, the presence of environmental factors that raise IQ does not make a decline in genotypical intelligence less of a problem. A more intelligent population would be desirable in any case. Also, it is likely that there are limits to nutritional improvements or what ever is raising intelligence, while the genetic decline could continue indefinitely if the more intelligent continue to choose smaller families, and to be more successful at birth control. Although the point about dysgenics in the developed world is made by the evidence on IQ and number of children, Lynn also reviews the large literature on number of children versus educational level, documenting that the more educated have fewer children. There is a correlation of about .6 between IQ and education (Eysenck, 1979; Brody, 1992). Census based studies of education and number of children are common, more common than those of fertility and IQ. Such a study makes it possible to document dysgenic fertility for Japan even though IQ

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

versus intelligence studies are lacking (Ogawa & Retherford, 1993). Among Japanese married women, there appears to be no consistent effect of education on fertility. However, the percentage of women who are married is lower among college graduates, producing a net dysgenic tendency.

Lynn's Table 9.8 summarizes studies of the heritability of educational attainment, showing it to be appreciable. It is not known the extent to which the relevant genes act by affecting intelligence rather than personality traits, such as conscientiousness. However, the showing of substantial heritability for educational levels along with the evidence that the more educated have fewer offspring suggests that future generations will be harder to educate. There is evidence that conscientiousness (Jencks 1979; Wiggins et al.) is related to educational achievement.

Other variables correlated with intelligence include socio-economic status and occupation. Because censuses have been collecting data on these for a long time, it is possible to go further back in time than is possible with direct comparisons of fertility and intelligence. For the United States, dysgenic fertility measured by socioeconomic status appears greater among black women than among white ones, a finding commented on earlier for education and fertility. For a number of countries the relationship has become J shaped, with moderate fertility among the professional classes declining to lower fertility among clerical workers, and then increasing to high fertility among semi-skilled and unskilled workers. Lynn comments (p. 134) that "This probably reflects efficient family planning by the middle classes, among whom the high professional classes have more children because they can afford more."
Interestingly, in the United States and Europe, the magnitude of the inverse relationship between fertility and status was relatively large in the first half of the nineteenth century, becomes larger in the second half and early decades of the twentieth century, and then narrowed again. Making estimates of the rate of decline in genotypical fertility over time for different generations, Lynn concludes that there has been dysgenic fertility over six generations, cumulating to about five IQ points. For any one generation the difference in number of children between the more and less intelligent classes may appear small, only large enough to produce a small IQ decline. Yet cumulated over a number of generations that is small in relation to

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the length of historical time, the effect becomes appreciable.

To make the case that the generally higher fertility among the lower socioeconomic classes will have a dysgenic effect it is necessary to argue that these classes are indeed lower in intelligence. Chapter 11 is devoted to doing this. One meta analysis (White, 1982) of 102 studies showed a correlation of .407 between the children's IQ and the parent's socioeconomic class. One study (Kaufman & Doppelt, 1975) computed the relationship separately for whites and blacks. Interestingly, the IQ of the white children from the lower socio-economic status had an IQ of 91 while the IQ of the black children of the highest socioeconomic status was 88. Given the quality of the environment high socio-economic blacks could provide, this points to a genetic cause for the racial differences in IQ, although Lynn does not comment here on this aspect of the data.

For intelligence differences between classes to emerge, there must be some tendency for those of high IQ to rise in status and those of low IQ to sink. This requires a certain degree of social mobility. Thus time is taken to document that social mobility appears to have always existed. That intelligence made a difference is documented by citing the work of Jencks (1972), that a 15 point difference in IQ between brothers led to a 17 percent difference in the brothers' earnings.

Perhaps the most effective demonstration that there are genetic difference between the social classes is provided by the evidence that the IQ's of adopted children and those in orphanages varies with the occupations of their parents (Jones & Carr-Saunders, 1927; Lawrence, 1931; Leahy, 1935; Weinberg et al. 1992), a result most plausibly explained by the genes for intelligence being more frequent among those in high status occupations.

The book includes data on possibly dysgenic fertility in economically developing nations, typically measured with census data relating number of children to either years of education or husband's occupation. Dysgenic fertility is found for most of Latin America and much of Asia (Ashurst et al, 1984; Martin & Juarez, 1995). Several Asian countries, including Indonesia are found not to display dysgenic fertility. Sub-Saharan Africa is found to show little evidence of dysgenic fertility, which is attributed to failure to make much use of contraception.

Having made the case that there is dysgenic fertility for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

intelligence the book moves on to the possibility of dysgenic fertility for what the earlier eugenicists called character, and what Lynn calls conscientiousness. By this he means a group of characteristics that have in common that they are generally considered desirable and that they involve self-control.

He starts by demonstrating that there are social class differences for a wide range of traits, including moral values, strength of the work ethic, smoking, alcoholism, sexual restraint, crime, and psychopathic personality.

Of course, social scientists have long recognized that these vary with social class, but the causation has usually been interpreted as being from class (or a related variable such as poverty or education) to these variables.

Thus Lynn devotes a chapter (which is of value as a summary on behavior genetics in its own right) to documenting the role of hereditary in these variables. He starts by presenting the heritabilities from twin studies of such personality traits as conscientiousness, responsibility, socialization, self-control, constraint, altruism, empathy, and anti-social behavior. These are all positive and generally appreciable, presenting evidence that these traits are genetically influenced. Further evidence is provided by studies of adopted children. The Loehlin, et al (1987) studies of conscientiousness in adopted children showed negative correlation between adopted children in the same family and essentially no correlation between adopted parent and adopted child. There are similar studies for psychoticism.

There is no real evidence that the various traits that Lynn discuses under conscientiousness are controlled by the same genes. However, since Lynn wrote Blum (1997) has argued that individuals who have inherited the A1 allele of the dopamine D2 receptor gene are more likely to exhibit such traits as alcoholism, cocaine addition, smoking, pathological gambling, obesity, and attention deficit disorder. He argues these may all be related to a deficit in the reward mechanism involving dopamine and that individuals with this allele (which have fewer receptors), seek more stimulation in order to make themselves feel right. If he is right, this provides evidence for a specific gene involved in many of the traits Lynn lumped under conscientiousness. For crime, evidence (Gottesman & Goldsmith, 1995) is presented that for a total of 545 twin pairs that

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the concordance rate (the percentage of cases where the twins had the same status as criminal or non-criminal) was 51.5% for identical versus 23.1% for fraternals, providing strong evidence that certain genes predisposed for criminal activity. Danish studies of adopted children show that the genetic factors are about twice as potent as environmental factors for criminal behavior. A study (Cloninger et al. 1978) of 1913 Danish twin pairs shows a heritability (percentage of variance explained by genetic factors) of 68% for males, and 58% for females. Studies of Danish adopted children (Hutchings & Mednick, 1977) show that the biological father's criminal record is about twice as powerful as the adopted father's criminal record in predicting the son's criminal record. Evidence is presented that part of the socio-economic difference in crime rates is due to genetic factors. A study (Van Dusen et al. 1983) of 14,427 adopted children in Denmark showed that the criminal conviction rates varied by the social class of the biological parents (as well as with that of the adoptee parents). The role of the class of the biological parents is only explainable if there are genes which affect criminal behavior which are more common in the lower classes. (However, the genes could affect intelligence rather than conscientiousness).

Likewise evidence is presented that a psychopathic personality, alcoholism, and smoking are all substantially influenced by genes. Evidence is presented from the Taubman (1976) study of 1019 US male identical twins and 907 pairs of non-identical twins (veterans). The heritabilities of years of schooling was calculated to be .44, of initial occupation .40, of adult occupation .46, and of income .50. While part of these heritabilities probably reflects the inheritance of intelligence, part is probably conscientiousness related traits.

The showing of high heritability for occupation (.46) and income (.50), combined with the evidence Lynn presents that the higher occupational and income classes are having fewer children than the lower classes, creates a presumption that the genes contributing to economic success are decreasing in frequency in the industrialized world, even if we are not sure of the extent to which these genes affect intelligence or personality traits. There is evidence that conscientiousness and related personality traits do contribute to occupational success (Elder, 1968; Jencks, 1979; Tomlinson-Keasey & Little, 1990; Barrick & Mount, 1991).

Having shown the possibility of dysgenic fertility for

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

conscientiousness related traits, Lynn then surveys in evidence on fertility as a function of such traits. The major trait he has data for is crime. He reviews the evidence on the number of siblings criminals have. He shows they typically come from larger than average families, relying partially on Ellis's (1988) compilation of 32 studies on this question. Lynn notes the possibility that the larger number of siblings may just reflect the difficulty parents have in socializing many children when they must divide their time and energies among many. Tygart's study (1991) of self reported anti-social behavior found a correlation between number of self-reported criminal acts and number of siblings of .41 for males and .49 for females. Lynn notes this is about twice as large as the correlations reported between intelligence and number of siblings, suggesting that the dysgenic fertility for criminal behavior may be twice as strong as for intelligence.

Lynn reports his own data tabulation (Lynn, 1995) showing that the fertility of parents of criminals is 77% percent greater than that of British of the same cohort. As Lynn points out, dysgenic fertility of this magnitude could produce significant effects in one generation.

In the discussion of how intelligence varies with number of siblings, Lynn discusses the possibility that such a relationship could exist, but rejects the idea that childlessness among those of low IQ could prevent a dysgenic effect. He notes the possibility that if criminals, psychopaths and the unconscientious tended to be childless, there need not by dysgenic fertility for these traits, but then dismisses the possibility. I am not certain the possibility can be so easily dismissed, especially for criminals. It is well known that criminals tend to end up in jail where they have little chance to produce offspring. It seems quite possible that in each generation some of those carrying genes for criminal activity actually become criminal and are imprisoned. These produce no children, while the other carriers of similar genes have families of above average size. The same could occur for psychopathy and a lack of conscientiousness, if men displaying such traits have trouble finding wives.

The concluding chapter defends the assumptions behind the eugenics movement founded by Galton. The argument for efforts to improve the genetics of mankind rested on a belief that traits such as intelligence, conscientiousness, educational achievement and social

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

class are significantly determined by hereditary, and that these tend to be concentrated in the educated social classes. When the eugenics movement was strongest, the scientific evidence for these beliefs was relatively weak. Documentation that those holding well paying jobs were indeed smarter than those holding poor paying jobs was lacking, and documentation that intelligence and personality traits were inherited was much weaker. That the eugenics movement was strongest when the evidence was much weaker shows that which public policy proposals are discussed is affected by more than the scientific data.

In the final chapter Lynn considers some of the arguments traditionally made against eugenics, such as that we did not know which genes are good. He points out correctly that there is general agreement on such propositions as:

1. High intelligence is good.
2. Self control is good.
3. Criminality and rape are bad.
4. Most diseases are bad.

The above provides a basis for deciding whose reproduction to encourage. At this point we could proceed, hoping to improve knowledge in the future.

One point of disagreement with Professor Lynn exists. He dismisses, perhaps a little too quickly (p. 205), the possibility that certain genes may contribute to both creativity and diseases. There is some evidence for this proposition (Eysenck 1995; Goodwin & Jamieson, 1990; Karlsson, 1991). Efforts to discourage reproduction by those with manic-depressive illness or schizophrenia, both of which have been shown to have a genetic component in twin studies, might produce adverse effects on creativity.

Likewise, I believe there is a possibility that some of the genes that contribute to criminality may be desirable in other circumstances. Lykken (1995) discusses this possibility, arguing that fearlessness is a personality trait that contributes to criminality. He suggests a conscience is more readily developed in an individual who fears the consequences of his actions. Likewise, sensation seeking may contribute to some forms of criminal activity which involves running risks. In other circumstances the same tastes may be satisfied by

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sports such as rock climbing or an occupation in law enforcement. Lykken argues that some of the genetically influenced personality trait that contribute to criminality result in criminality only when combined with inadequate parental socialization.

One theoretical concern is that many traits may be influenced by V genes (ones that have more than one effect) such that selecting for a desirable trait also selects for another trait that is undesirable. Thus there could be unintended consequences from an eugenics program.

To illustrate the type of problem that is theoretically possible consider myopia. This is widely considered to be a genetically influenced condition. It is known to run in families, and twin studies show it to have a high degree of heritability (Curtin 1985). However, it is also known that high intelligence and myopia go together (Teasdale, Fuchs, & Goldschmidt, 1988; Rosner & Belkin 1987; Benbow & Benbow 1984, p. 484, 1986). High intelligence is also known to be a partially genetic trait. The evidence is that the two genetic traits are V, with one set of genes affecting both (Cohn, Cohn, & Jensen, 1988). One possibility is that the close work that results from reading and studying leads to myopia. Another, which the writer has proposed, is that a single gene (or gene complex) affects both brain size and the size of the eyeball (which is embryologically derived from the same tissue as the brain) and this produces the correlation (Miller, 1992).

Now if someone tried to discourage those with myopia from reproducing, a byproduct would be selection for lower intelligence. This would be unfortunate, since myopia is relatively easily handled with corrective glasses. Of course, enough is known so that the above mistake appears unlikely. About the only way it could be made would be for a version of political correctness to make selection for intelligence impossible, while selection against genetic disease related conditions was promoted.

One should not exaggerate the problem that certain genes may have both desirable and undesirable effects. There is no real dispute about the undesirability of traits such as disease, stupidity, lack of self discipline etc. Also, any feasible eugenics program will have only a moderate effect after one generation. The risk of permanently eliminating desirable genes is very low, and if future research should call for policy changes, there would be plenty of time to do so.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Possible Eugenic Policies

There is one thing the reader will not find in this volume. This is a discussion of what to do about the problem. Professor Lynn makes a strong case that the genetic quality of the population is deteriorating with regard to intelligence and conscientiousness. He clearly regards this as undesirable. However, he does not discuss possible policies. He does close the book with a statement that a further volume is planned.

What to do about the dysgenic tendencies is a hard problem. Many feel that reproductive decisions should only between the parents, and are very reluctant to see government intervention in these decisions. Anyone familiar with the tendency of power to corrupt should be concerned by governmental regulation of reproduction.

I have discussed elsewhere possible eugenic policies (Miller, in press).

Some might say that reproductive decisions affect only the parents involved and that therefore others have no interest. Yet, the child is affected by a decision not to create him. Most of us are happy that we exist. However, the utility the child will get from its own existence raises difficult philosophical issues I will not discuss here. Those other than the parents are affected by reproductive decisions. There are what economists call externalities. If someone grows up to be criminal, his criminal activities will affect many. It could be argued that society has an interest in minimizing the number who are likely to grow up to be criminals.

Perhaps more importantly, in today's welfare state, those who lack the health or mental ability to be self supporting, or who lack a husband, are supported by the state. This raises the obvious question of whether the state (i.e other citizens) should act to prevent the birth of children whom it will have to support.

In the long run, the two feasible alternatives appear to be either free choice in reproduction, with the parents responsible for supporting the children they bring into the world, or a welfare society combined with restrictions on how many children are born. If the government supports all children born, eventually the population will be dominated by those with the genes and culture for high fertility. The population will grow until not all children can be supported. At this time, the welfare system will either breakdown with poverty

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

limiting population growth, or some form of fertility regulation will be introduced. Admittedly, this process will taken many generations and some may choose to ignore the problem during their generation. Many more will choose to direct their efforts to what appear to be more pressing problems.

An obvious idea is to tie the receipt of welfare to using a drug which prevents the birth of additional children, such as Norplant. Given the correlation of welfare with low intelligence (for the US data see Herrnstein & Murray, 1994), and probably with other undesirable genetic traits, such a proposal would improve a nation's genetic stock. Given the difficulty of knowing whether promises to use birth control are being observed, tying receipt of welfare to promises to use birth control is probably infeasible. Penalizing mothers for having babies after they promised not to do so would either end up penalizing the children, or force the mothers into having abortions.

It is to be expected that any measures that reduces the pool of low IQ, uneducated individuals would reduce the competition for the jobs such people can do. Such a program should reduce the unemployment rate, and raise incomes among the low IQ part of the population.

The final outcome of such birth control would be to reduce inequalities by two mechanisms.

1 Reducing the number of those with traits leading to low income (low IQ, short time preference, etc.) in the society. This raises the weighted average skill level.

2. By raising the wage rates for unskilled labor. It is a standard prediction of economic models that reducing the supply raises the price. It follows that reducing the supply of low wage labor would raise the wage rates for such services.

By the definition of eugenics, it is an effort to improve the genetic composition of a population. However, in practice any eugenics program would base decisions on phenotypes not genotypes, since in only rare cases (typically a few genetic diseases) do we know which genotypes to encourage. For instance, since we do not know the genes for intelligence, an eugenic program aimed as intelligence really is merely one for increasing the fertility of the highly intelligent, or reducing the fertility of the less intelligent.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Interestingly, for such a program to succeed all that is necessary is for intelligence to run in families. It does not matter whether intelligence runs in families for environmental or genetic reasons.

Suppose low intelligence was caused by a unknown type of bad parenting that was practiced in certain families, with each generation learning the technique from the previous generation. Increasing the fraction of children in the families that practiced good parenting (which might be determined by the parents themselves being of high intelligence) would increase intelligence in the next generation. An environmentally caused problem that runs in families can be controlled by decreasing the fraction of births in certain families, just as a genetically caused problem can be controlled. In most cases the policy implications of environmentally and genetically caused low IQ are the same for who should be encouraged to have children. The key question for predicting the effects of a program is the correlation between the IQ's of parents and children, and knowing the causes of this correlation is not critical.

Given the above observation one asks why Lynn went to so much trouble to document that intelligence and other desirable traits are affected by genes, which all that is logically necessary to make the case for most eugenics type policies is to show that certain traits run in families. Likewise, why do opponents of eugenic programs go to so much trouble in trying to show that problems run in families for environmental reasons? Why do those that believe in environmental causes for social problems oppose programs that would operate by affecting fertility?

The most probable answer is that if a specific environmental cause for a problem was known we think, and hope, that there would be an easy environmental solution for the problem. If such programs were known they would work faster than relatively slow acting eugenics type programs. Politicians under pressure to produce quick results would prefer such programs. Alas, for intelligence attempts to discover easy solutions have failed there is a long history of such failed programs (Spitz, 1986).

The reasons why conservatives seem more willing to accept eugenics programs may be that they are more pessimistic about human nature and the perfectibility of mankind. This may make them more willing to consider eugenics programs. These, at best, promise only a slow improvement in the human condition, and perhaps only

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

preventing a deterioration. In contrast, one who believe in human perfectibility will be reluctant to accept programs that can have only limited benefit.

Many programs that work by manipulating the environment are oversold by claiming more benefits than they deliver. One sometimes believes that even the proponents of the program recognized that claims are exaggerated, but feel that the programs are worth doing even if the effects are only moderate. Because of the long length of human generations, and the randomness in genetic recombination, even the most optimistic claims for eugenic programs show effects that taken place over generations. In competing with proposals that are claimed to be produce large effects in a single generation, eugenic proposals are likely to lose. Given the large number of possible environmental programs, even if one is shown to not work well (and many have noted how hard it is hard to eliminate programs once they are started), there will always be another one about which claims of large effects in a single generation can be made. In education, there always seem to be a new program which promises great results, but the actual test performance of children does not go up from generation to generation.

Eugenic programs that work by manipulating family size can be expected to accomplish their goals, although slowly and over a period of generations. If there are unrecognized environmental factors being transmitted from parents to children, such programs will also increase the percentage of children exposed to such positive environmental effects.

There are a few cases of low IQ known to be due to environmental causes (say an accident that injured the brain) where there would be no eugenic objection having children. However, such cases are rare. Even in these cases, one might feel that it was best for the child not to have a low IQ (and probably low income) parent, and wish to discourage childbearing.

Westman (1994), even though convinced that bad parenting leads to most problems has written a book, Licensing Parents, which proposes just that, licensing parents. Some of his proposals would probably end up having eugenic effects through the genes. Those who could not get licensed as parents would probably be of genetically low intelligence, and the proposal would end up having positive eugenic effects.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

While such drastic measure are unlikely to be adopted in the current circumstances, there may be less radical measures that could be adapted. Sperm banks today appear to screen for genetic defects and AIDS but generally do not try to select donors with the genes for intelligence and conscientiousness. Yet this could be done at low cost by some simple testing prior to accepting donors. An exception is a sperm bank established by Robert Graham (Van Gelder, 97) which has obtained considerable publicity by seeking donors from Nobel prize winners and other accomplished scientists. Routinely selecting sperm bank donors for intelligence and other good qualities is a low cost measure that should be more widely adopted.

Professor Lynn has made a strong case that there is dysgenic fertility for intelligence, and probably also for conscientiousness. Admittedly the effects in any one generation are minor, but over a period of a few generations the genetic quality of a population will be substantially impaired. There is a problem here that is at least worthy of discussion.

References

Ashurst, H., Balkaran, S. & Casterline, J.B.
1984 Socio-economic differentials in recent fertility. *Comparative Studies*, 42, 1-61.

Bajema, C.J.
1968 Relation of fertility to occupational status, IQ, educational attainment and size of family of origin: A follow-up study of the male Kalamazoo public school population. *Eugenics Quarterly.*

Bajema, C.J.
1963 Estimation of the direction and intensity of natural selection in relation to human intelligence by means of the intrinsic rate of natural increase. *Eugenics Quarterly*, 10, 175-187.

Barrick, M.R. & Mount, M.K.
1991 The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, 44, 1-26.

Benbow, C.P. & Benbow, R.M.
1986 Physiological correlates of extreme intellectual precocity. *Mensa Research Journal*, 21 , 54-87.

Blum, K., John G. Cull, Eric R. Braverman & David E. Comings
1996 Reward Deficiency Syndrome. American Scientist, Britain, Japan and the U.S.A. *Personality and Individual Differences*, 7, 23-32.

Brody, N.
1992 Intelligence. New York: Academic Press

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Broman, S., Nichols, P.L., Shaughnessy, P. & Kennedy, W.
1987 Retardation in Young Children. Hillsdale, N.J.: Lawrence Erlbaum.
Cloninger, C.R., Christiansen, K.O., Reich, T. & Gottesman, I.
1978 Implications of sex differences in the prevalence of anti-social personality, alcoholism and criminality for family transmission. *Archives of General Psychiatry*, 1978, 35, 941-951.
Cohn, S.J. Cohn, C.M.G. & Jensen, A.R.
1988 Myopia and intelligence, a pleiotropic relationship. *Human Genetics*, 80, 53-58.
Cortin, B.J.
1985 The Myopias, Philadelphia: Harper & Row.

Elder, G.
1968 Achievement motivation and intelligence in occupational mobility. *Sociometry*, 31,327-354.
Ellis, L.
1988 The victimful-victimless crime distinction, and seven universal demographic correlates of victimful criminal behavior, *Personality and Individual Differences*, 9, 525-548.
Eysenck, H.J.
1979 The Structure and Measurement of Intelligence. London: Springer-Verlag.
Eysenck, H.J.
1995 Genius: the Natural History of Creativity. Cambridge University Press.
Flynn, J.R.
1984 The mean IQ of Americans: Massive gains 1932 to 1978. *Psychological Bulletin*, 95, 29-51.
Flynn, J.R.
1987 Massive IQ gains in 14 nations: What IQ tests really measure. *Psychological Bulletin*, 171-191.
Goodwin, F.K. & Jamieson, K.R.
1990 Manic-depressive Illness. New York: Oxford University Press.
Gottesman, I.I. and Goldsmith, H.H.
1995 Developmental psychopathology of anti-social behavior: Inserting genes into its ontogenesis and epigenesis. In C. Nelson (ed.), Threats to Optimal Development. Hillsdale, N.J.: Lawrence Erlbaum.
Gruenwald, P., Funakawa, H., Mitani, S., Nishimura, T. & Takeuchi, S.
1967 Influence of environmental factors on foetal growth in man. Lancet, 13 May, 1026-1028.
Herrnstein, R. J. & Murray, C.
1994 The Bell Curve: Intelligence and Class Structure in American Life, New York: The Free Press.
Hutchings, B. and Mednick, S.A.
1977 Criminality in adoptees and their adoptive and biological parents: A

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

pilot study. In S.A. Mednick and K.O. Christiansen (eds.), Biosocial Bases of Criminal Behavior: An Anthropological Perspective. North Scituate, Mass.: Duxbury Press.

Jencks, C.R.
1972 Inequality, New York: Basic Books

Jencks, C.R.
1979 Who Gets Ahead? New York: Basic Books.

Jones, D.C. and Carr-Saunders, A.M.
1927 The relation between intelligence and social status among orphan children. *British Journal of Psychology*, 17, 343-364.

Karlsson, J.L.
1991 Genetics of human mentality. New York: Praeger.

Kaufman, A.S. and Doppelt J.E.
1976 Analysis of WISC-R standardization data in terms of the stratification variables. *Child Development*, 47, 165-171.

Kost, K. & Forrest, J.D.
1995 Intention Status of U.S. birth in 1988: Differences by mothers' socio-economic and demographic characteristics. *Family Planning Perspectives*, 27,11-17.

Loehlin, J.C., Willerman,L. & Horn, J. M.
1987 Personality resemblance in adoptive families: A 10 year follow up. *Journal of Personality and Social Psychology*, 53, 961-969.

Lykken, D.T.
The Antisocial Personalities. Hillsdale: Lawrence Erlbaum.

Lynn, R.
1990 The role of nutrition in secular increases in intelligence. *Personality and Individual Differences*, 11, 273-288.

Lynn, R.
1995 Dysgenic fertility for crime. *Journal of Biosocial Science*, 27, 405-408.

Lynn, R. & Hampson, S.
1986 The rise of national intelligence: Evidence from Britain, Japan, and the U.S.A. *Personality and Individual Differences*, 7, 23-32

Lynn, R.
1996 Dysgenics: Genetic Deterioration in Modern Population, Westport: Praeger.

Martin, T.C. and Juarez, F.
1995 The impact of women's education on fertility in Latin America, *Family Planning Perspective*, 21, 52-57.

Miller, E.
1992 On the Correlation of Myopia and Intelligence, *Genetic, Social, and General Psychology Monographs*, 118: 4, 363-383.

Miller, E.
1994 Paternal Provisioning versus Mate Seeking in Human Populations,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Personality and Individual Differences, 17: 2, 227-255.

Miller, E.
1996 Review and Extension of Heredity and Humanity. *Journal of Social, Political, and Economic Studies*, 21, No. 3, 349-360.

Miller, E.
(in press). The Survival of Genes for Stupidity: Consistency of Fitness and Heritability. Personality and Individual Differences.

Modell, B & Kuliev, A.M.
1989 Impact of public health on human genetics. *Clinical Genetics*, 36, 286-298.

Nystrom, S., Bygren, L.O. and Vining, D.R.
1991 Reproduction and level of intelligence. *Scandinavian Journal of Social Medicine*, 19, 19, 187-189.

Nagawa, N. and Retherford, R.D.
1993 The resumption of fertility decline in Japan: 1973-92, *Population and Development Review*, 19, 703-741.

Papavassiliou, I.T.
1954 Intelligence and Family Size. Population Studies, 7, 222-226.

Pearson, R.
1992 Shockley on Eugenics and Race. Washington: Scott-Townsend.

Pearson, R.
1996 Heredity and Humanity. Washington, Scott-Townsend Press.

Rosner, M. & Belkin, M.
1987 Intelligence, education, and myopia in males. *Archives of Opthalmology*, 105 1508-1511.

Rushton, J.P. & Ankney, C.D.
1996 Brain size and cognitive ability: Correlations with age, sex, social class, and race. *Psychonomic Bulletin and Review*, 3, 21-36

Scarr, S. & Weinberg, R.A.
1978 The influence of family background on intellectual attainment. *American Sociological Review*, 43, 674-692..

Spitz, H.H.
1986 The raising of intelligence: A selected history of attempts to raise retarded intelligence. Hillsdale, N. J.: Erlbaum.

Storfer, M.D.
1990 Intelligence and Giftedness, San Francisco: Jossey-Bass.

Taubman, P.
1976 The determinant of earnings: Genetic, family and other environments; a study of male twins, *American Economic Review*, 66, 858-870.

Teasdale, T.W. & Owen, D.R.
1984 Heredity and familial environment in intelligence and education level. *Nature*, 309, 620-622.

Teasdale, T.W. & Owen, D. R.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Teasdale, T.W. & Owen, D. R.
1989 Continuing secular increases in intelligence and a stable prevalence of high intelligence levels. *Intelligence*, 13, 255-262. Teasdale, T.W.
Fuchs, J. & Goldschmidt, E.
1988 Degree of myopia in relation to intelligence and educational level. *Lancet*, 1351-1353.
Tomlinson-Keasey & Little, T.D.
1990 Predicting educational attaintment, occupation achievement, intellectual skill and personal adjustment among gifted men and women. *Journal of Educational Psychology*, 82, 442-455.
Tygart, C. E.
1991 Juvenile delinquency and number of children in a family. *Youth and Society*, 22, 525-536.
Van Court, M. & Bean, F.D.
1985 Intelligence and fertility in the United States: 1912-1982. *Intelligence*, 9, 23-32.
Van Gelder, L.
1997 Robert Klark Graham, 90, developed shatterproof lenses, N.Y. Times, February 18, 1997
Vinings, D.R.
1982 On the possibility of the re-emergence of a dysgenic trend with respect to intelligence in American fertility differentials. *Intelligence*, 6, 241-264.
Vinings, D.R.
1995 On the possibility of the re-emergence of a dysgenic trend: An update, *Personality and Individual Differences*, 19, 259-265.
Waller, A.R.
1890 Human Selection. *Popular Selection Monthly*, 38, 90-102. Washington, D.C.: Child Trends, Inc.
Weinberg, R.A., Scarr, S., & Wadman, I.D.
1992 The Minnesota transracial adoption study: A follow-up of IQ test performance at adolescence, *Intelligence*, 16, 117-135.
Westman, J.C.
1994 Licensing Parents. New York: Insight Books.
White, D.J. & Farrington, D.P.
1982 The Relation between socio-economic status and academic achievement, *Psychological Bulletin*, 91, 461-481.
Wiggins, N., Blackburn, M. & Hackman, M.
1969 Prediction of the first year graduate success in psychology peer ratings, *Journal of Educational Research*, 63, 81-85.
Willerman, L., Schultz, R., Rutledge, J. N. & Bigler, E. D.
1991 In vivo brain size and intelligence. *Intelligence*, 15, 223-228.
Zill, N., Moore, K., Ward, C. and Steif, T.
1991 Welfare Mothers as Potential Employees.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Man
Between Past and Future

BRUNETTO CHIARELLI

University of Florence, Italy

CONTENTS

PRIMATE EVOLUTION AND PALEONTOLOGICAL EVIDENCE CONCERNING THE DISPERSAL OF HOMINOIDS

THE FIVE ECOGEOGRAPHIC SUBSPECIES AND THEIR POPULATIONS

CLIMATE, NUTRITION, IMMUNOLOGICAL RESPONSES, FOOD HABITS AND INTELLIGENCE

THE CURRENT HUMAN POPULATION EXPLOSION

THE NEED FOR GLOBAL BIOETHICS

ISBN: 0-941694-34-8
160 Pages, Illustrated, $16.00
Add $2.00 (U.S.) or $2.50 (Foreign) Post and Handling
MASTERCARD/VISA ORDERS ACCEPTED

Institute for the Study of Man
1133 13th St. NW, Suite C-2
Washington, D.C. 20005
Tel: (202) 371-2700 Fax: (202) 371-1523

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

BOOK REVIEWS

The Industrial Revolution and Free Trade
Burton W. Folsom, Jr., editor
Foundation for Economic Education, 1996,
Irvington-on-Hudson, NY 178 pages, paperback

A collection of articles published in *The Freeman* over the past several years by the pro-free market Foundation for Economic Education, this book deals with a series of fascinating people and events: such historic leaders of the Free Trade movement as Richard Cobden and John Bright, who led the 1840s movement in Britain for the repeal of tariffs on grain; and such subjects as child labor, the survival of the whales, the war against infectious disease, the digging of the Suez Canal, a history of Hong Kong, and the Irish famine.

Its first section contains essays about the theory of capitalism and its principal opponents, Mercantilism and Marxism. The second discusses the Industrial Revolution. Here, it continues the rebuttal, long and very credibly underway among supporters of a market economy, that shatters the "doom and gloom" perception of the Industrial Revolution that was spawned so successfully during the nineteenth century by an intelligentsia whose members supported either the aristocratic anti-bourgeois Old Regime or the emerging Left.

The book's third section argues the case for Free Trade. The reader is treated to some excellent instruction in the fundamental theory of a market economy: such things as the international division of labor, an economy that is self-regulating through the price system, the importance of the accumulation of capital, and the mobility of both capital and labor.

There are important insights, some of which reverse the way Americans have been taught to see things. One of these has to do with the evil of child labor, which is commonly thought to have been abolished by child-labor laws. Lawrence W. Reed is on the mark when he explains, contrary to this common belief, that "child labor was relieved of its worst attributes not by legislative fiat, but by the progressive march of an ever more productive, capitalist system. Child labor was virtually eliminated when, for the first time in history, the

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

productivity of parents in free labor markets rose to the point that it was no longer economically necessary for children to work in order to survive." Until then, no political movement for child labor's abolition would have been thought of, much less have enjoyed appreciable support. The Left's ideological claim to a connection between child labor prohibitions and the disappearance of child labor is one of the clearest *post hoc* fallacies that a logician can point to in the history of social thought. Social legislation often comes along just as an evil is disappearing, and it is a serious mistake to assign the legislation credit for the disappearance.

However, despite the well-deserved praise that a reviewer is justified in giving to these essays on-the grounds just mentioned, there are also reasons to be much less favorable. In the years to come, American conservatives and "classical liberals" will find it increasingly necessary to engage in a fundamental debate over the efficacy, precisely to a free society, of Free Trade.

Throughout the past two and a quarter centuries – i.e., since Adam Smith – this ideology has seemed fully compatible with the overall values and institutions of an individualistic free society. It has easily taken its place as part of that complex of ideas.

An important exception has perhaps been that the high tariff wall adopted by the United States between 1865-1933 played a major role in making the United States a major industrial power. Would most Americans consider it to have been better to have remained primarily a supplier of agricultural products and raw materials? A complete discussion should grapple with an issue that is so obvious and so important, and this collection of essays does not. The issue is basic to the theory, since it brings to the fore the question of whether – from any given people's point of view (as distinct from an economist's point of view considering only "what benefits the consumer") – trading "according to ones comparative advantage" is always most truly advantageous.

Now, under the circumstances of the on-rushing "global economy," the relation between Free Trade and a free society is no longer nearly so clear as it has so long seemed to be. This is so for two reasons:

First, the theory of an international free market calls for an uninhibited flow of capital and labor. To the extent this is perfectly realized, and subject to time-lags in its attainment and some

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

attenuation due to "utility of place," all unskilled labor in the world will converge upon the same level of compensation. The same is true of skilled labor and of the return on capital.

It is important to realize that this is what the theory calls for – and what it countenances. What it means in actuality, of course, is that unskilled labor in the United States, India and China will tend toward a common level, since each person providing such labor will be in competition with all others doing the same. Nor is there any safe harbor for skilled labor, the practitioners of which will be subject to the same process. (And we want to remember that there are, and soon will be, millions of Chinese, Singaporeans, Indians, Pakistanis, and the like, prepared to provide skilled services.)

If someone objects that "we as Americans don't want our workers brought to a common level with those in India and China," the Free Trade proponent will answer that the market is cosmopolitan and pays no regard to nationality. This rebuttal is compelling only so long as we allow ourselves to be limited to a theoretical system that takes into account solely economic values and that eschews any special concern about a given people or nation. If we say "we care about those other things," economic science has nothing to say to us other than to point to certain costs that will be incurred. (It is important to note that, at the same time, that science takes no account of the costs impacting on any *non-economic* values people may hold. The pointing to "costs" should be considered a two-way street. It can be used as much against Free Trade as for it, which is something that proponents of the unhampered market economy have long chosen to ignore.)

Second, many supporters of *laissez-faire* economics are following its logic to favor unrestricted immigration into the United States and Europe (as part of endorsing it for any place in the world). The writers in the compilation under review mainly remain silent about this implication, but the logic can be seen in the recent writings by Jacob Hornberger and Julian Simon. Their's is a logic that, if pursued, spells the end of any given nation, culture or civilization, including Western Civilization. Again, the ideology cares nothing about such things; it is founded solely upon deductions from laudable premises concerning "individual rights" and market transactions stemming from those rights.

All supporters of a free society are forced, therefore, to ask: Is

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

this proffered decimation of the standing of American workers (including the middle class) and of Western Civilization, including the national identity of the United States as a political entity, and as a people, in the best interests, either theoretically or practically, of a free society as best conceived? I don't think so. The *laissez faire* theory is a deductive system from premises that leave out too much that is vital, in any given time and place, to freedom. It serves as an important *part* of the mental constructs that are important to thinking about the attainment of individual liberty, but is only a part, to be harmonized with all other imperatives.

The compilation of essays under review is essentially a popularization of the thinking underlying a market economy as applied to the Industrial Revolution and to Free Trade. As such, it grapples deeply with neither of the difficulties just mentioned (nor with the more general issue of the omission of non-economic values in general). But it is imperative that supporters of a free society do so – and quickly. The contributors to the Foundation for Economic Education's compilation are the ideal people to do this, if only they will broaden the horizons of their deductive system.

Dwight D. Murphey

The U.K. Economy
M. J. Artis
Oxford University Press, 1996

This is the fourteenth edition of an ongoing series of updated collections of data concerning the British economy. It seeks to embrace evolving trends, such as the involvement of the U.K. in the European Union, the impact and extent of privatization, and changes in the financial system as well as in traditional fields such as productivity, inflation and unemployment.

Interesting comparisons are made with other countries around the world. However, the commentary is not so progressive. Thus, in a section entitled "Does national debt matter?" the author accepts the fact that a large national debt involves substantial "transfer payments" from one segment of the community to another, and from the present generation to future generations, as though these were the only drawbacks. He does not mention the fact that the burden of the additional taxation necessary to pay the interest may discourage

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

economic initiative. Also, while excusing the interest burden as merely a "transfer" of wealth which will not effect the economy, he does not think to mention that much of the transfer might be going to recipients outside of Britain.

Similarly, in discussing unemployment no mention is made of immigration as a source of excess labor, although a section is given over to discussing the extent to which people of immigrant stock allegedly suffer from "pure discrimination." Furthermore, in referring to the "absurdity" of protecting industries, he ignores the fact that those nations which have succeeded in building successful industrial bases in the world today have done so not solely by virtue of having competent labor forces which will work for low wages, but because they have in most cases followed intelligent mercantilist policies. It is one thing to buy cheap goods from abroad when one's own work force is fully engaged, but it is another to have to carry the burden of heavy unemployment and a rising generation of unemployed youths who seek in vain for employment in a country which has seen its own industries die – and who in due course will become *unemployable* for lack of work experience during their formative years.

There is another important aspect of a continuing trade imbalance that the author also ignores, and that is that those from whom one purchases cheap goods will one day have no other way of using the money they have been paid for these goods, except by buying up the few remaining assets the more prodigal country may still retain – its land, its buildings, and its few remaining industries.

Ukraine's Economic Reform:
Obstacles, Errors, Lessons
Raphael Shen
Praeger, 1996

The Ukraine is the second largest (smaller only than Russia) country in Europe, and motherland to 52 million people. In 1993, 72% of its inhabitants were Ukrainian natives, 22% Russians, 1% Jews and 1% Byelorussian. With its age-old inheritance of well-watered, rich soils (now contaminated in no small part by nuclear radioactivity), it was in prehistory one of the most advanced and prosperous areas of Europe.

Occupied in early times by Slavs, closely akin to the Russians,

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

it first emerged as a center of commerce and civilization under Varangian Viking rulers who established their capital at Kiev – so that Kievan-Rus gave the area its first distinctive political identity. It was a subsequent prince of this line who marched northwards to establish a new principality, named Moscovia or Moscow. But the Tartars swept across the open plains in the thirteenth century, and in 1240 Kiev was completely plundered by the Golden Horde under the nephew of Genghis Khan.

The Ukraine continued to be raided with frequency by the steppe nomads, until Gediminas, the "king of Lithuania and Rus," checked the Mongol hordes and in the mid-14th century incorporated it in an extensive Lithuanian empire. Then, in 1569, a Polish-Lithuanian Commonwealth was formed, largely under the domination of Poland, and Polish nobles became the predominant force in the Ukraine, appointing Jewish tax-collectors and managers for their extensive estates. Seeking to convert the Slavic Ukrainians, who had followed the Eastern Orthodox faith since the days of Kievan-Rus, to Roman Catholicism, they provoked a new sense of Ukrainian nationalism which was both anti-Polish and anti-Jewish. Peasants escaping from the oppression of the Polish nobles and their tax collectors joined mobile horse-riding warrior bands, the "free Cossacks", as distinct from the horse-riding Cossack warriors who were employed by the Polish nobility to defend the territory against the still active Tartars of the adjacent steppelands.

Falling under Russian rule as the power of Moscow developed and Poland itself was fought over by various rival European nations, the Ukraine truly suffered under Communism, as has been well documented. The land-owning peasant farmers and nobility alike were murdered on a massive scale. Under brief Nazi domination during World War II the Germans misplayed their cards and failed to recruit the whole-hearted support of Ukrainians, who hated the Russians both as Russians and especially as Communists. Finally, following the collapse of the Communist empire, Ukraine has sought in a very half-hearted way to re-establish private enterprise, without really knowing how this was to be done. This book is a competent and detailed account of the "obstacles, errors and lessons" to be learned from the disastrous efforts of Ukraine to rebuild its economy on the ruins of an ineffective Marxist system. It is to be recommended to both economists and political scientists alike.

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Heart of Darkness

The heart of darkness awaits. It's the unknown place that exists in the wilderness, among the people, inside your mind. As a researcher, you've chosen to venture into this shadowy world to extract its truths. How deep are you willing to go?

The expedition is difficult. You need the best tools.

Sociological Abstracts (SA) and Social Planning/Policy & Development Abstracts (SOPODA) outfit you for this important journey.

Drawing from more than 2,400 journals published in 35 countries, SA and SOPODA present abstracts of articles, books and conference papers. Bibliographic entries will guide you to relevant dissertations and important book and other media reviews. All are expertly classified and indexed for easy access.

SA and SOPODA are available in a variety of media: print, online, the sociofile CD-ROM, and magnetic tape.

Explore the unknown with confidence by using the most timely information directly related to your areas of interest and expertise.

SAI's Web site, located at www.socabs.org, contains searchable subsets, hot topics, the *Note Us* newsletter, and links to other relevant sites and resources.

For more information about our products and services, visit our Web site, or contact us at:

sociological abstracts, inc.

P. O. Box 22206, San Diego, CA 92192-0206
619.695.8803, Fax 619.695.0416
Internet: socio@cerfnet.com
Web site http://www.socabs.org

SAI products are available in print; online from Knight-Ridder, DIMDI, OCLC and Ovid; on CD-ROM from SilverPlatter, EBSCO, Ovid and NISC; and on magnetic tape directly from SAI. For document delivery contact SOCIOLOGY*Express. Phone: 619.695.8803 Fax: 310.208.2982

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE ABM TREATY CHARADE:
A Study in Elite Illusion and Delusion

WILLIAM T. LEE

Former CIA and DIA analyst of Soviet and U.S. missile programs

CONTENTS

Foreword by William R. Graham; Acronyms and Designators; Personalities; "Arms Control" Illusions and Realities; FSU ABM Programs from World War II to 1968; Initial Development of the Moscow ABM System; Initial Stages of NABM Development; ABM Nuclear Warhead Development; 1967 - Crisis in Soviet ABM Programs; Lacunae in the Russian Records; U.S. ABM Programs in the 1960s; The SALT ERA; Sacrificing U.S. ABM on the Altar of MAD; Modernizing Moscow's Defenses; Modernizing NABM; Other FSU Strategic Defensive Programs; "Arms Control" of Strategic Ballistic Missiles; The ABM Treaty and The Real Brink of Nuclear War; Gorbachev, and the Demise of the Empire; Corroboration of LPARs As Battle Management Radars; Dual Purpose Design of the SA-10; Transforming "SAMs" into Regional ABMs; Verification of "Arms Control" Agreements; ABM Treaty Violations; Violations of Strategic Offensive Force Agreements; The Current U.S. Predicament; START II; Conclusions.

"This exhaustive review of the ABM Treaty flaws and violations makes the most compelling case yet for a new approach to arms control and our security strategy in the post-cold war era ... it is a "must read" for policy makers and those interested in national security."
Curt Weldon M.C., *Chairman, House Military. Res. & Devel. Subcommittee*

"Bill Lee lays bare Soviet deception that successfully impeded U.S. efforts throughout the Cold War to exploit U.S. Technological advantages to defend against Soviet missiles. Regrettably, this impedance continues after the Cold War because of the West's infatuation with arms control"
Ambassador Henry Cooper, *Chairman, High Frontier and former SDI Director and Chief U.S. Negotiator at the Geneva Defense and Space Talks*

ISBN: 0-930690-54-0 *166 pages, May 1997, $28.00*
Add $2.00 (U.S.) or $2.50 (Foreign) Post and Handling
MASTERCARD/VISA ORDERS ACCEPTED

Council for Social and Economic Studies
P.O. Box 34070, Washington DC 20043
Tel: (202) 371-2700 Fax: (202) 371-1523

LICENSED TO UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED